

# 33 The Architect & Building News

17 August 1960 V. 218/7 1s. Weekly

Blackley Crematorium

Wolverhampton Market



## Rely-a-Bell in Britain's shops & stores



### 5.30 SAFETY NET AT SAMPSON'S

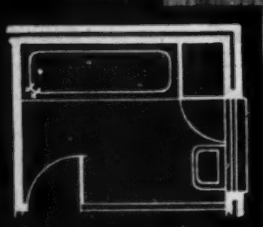
The last customer has left. Sue the salesgirl has powdered her nose, and put on her hat. Now is the time for Rely-a-Bell to take command. Down, like roller shutters, over the shop windows and doorway come Rely-a-Bell steel grilles. Special locking devices hold them in the protective position—the goods on display are secure against smash and grab attack. Rely-a-Bell grilles are available—with or without remote control—in many sizes, weights, and finishes. Often they are left down, day and night, over windows; for while they emphasize the value of the goods, they do not obscure the view—as you may have noticed!



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The U-value of the window-area only was found to be 0.38: with TOMO pleated blinds down, it became 0.35. At 0.38, TOMO double-glazed WINDOWS are substantially (29%) better than the U-value of 0.47 quoted for conventional double windows in the I.H.V.E. Guide to Current Practice, 1955.

The excellent thermal-efficiency achievement of TOMO double-glazing (amply demonstrated in the report of recent B.R.S. Tests, quoted on left) is one of many good reasons why architects specify these superb windows.

Another is the ever-increasing need for maximum sound reduction. In this respect TOMO WINDOWS, afford a reduction in sound level of approximately 40-50 decibels.

The marked success of TOMO double-glazed WINDOWS is due to the fact that two panes of glass are carried in separate sashes, which in turn, are coupled together in such a manner that air filtration can take place between the panes. This time-honoured method of coupling, which is used extensively throughout Scandinavia, not only prevents condensation forming between the panes but allows the sashes to be opened for the purpose of cleaning the insides of the two panes and for gaining access to TOMO pleated blinds that can be housed between them.

TOMO double-glazed WINDOWS also offer the advantages of finely-controlled ventilation and total indoor window-cleaning. They are suitable for inward or outward opening and can be top-hung, bottom-hung, side-hung or pivot-hung.

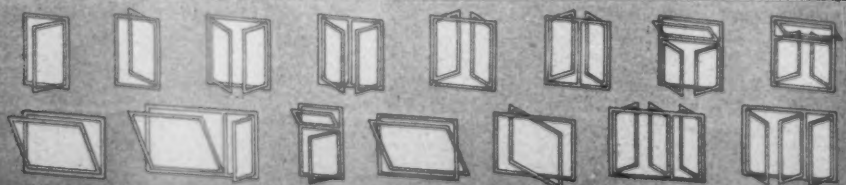
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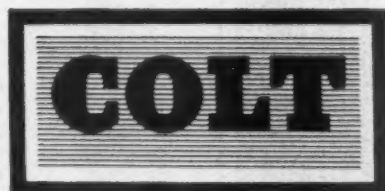




Problem:

# CONDENSATION

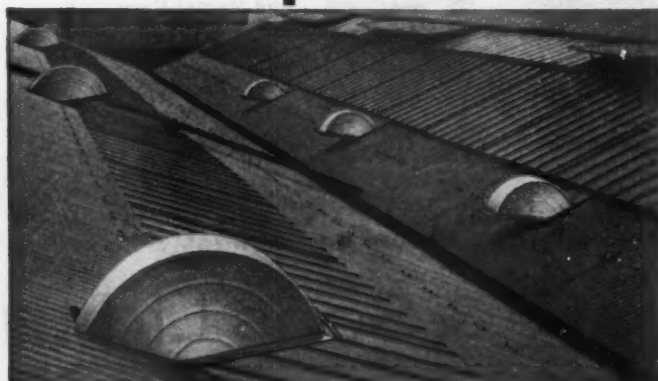
Solution:



Ventilation

Place:

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The pressing of rubber mouldings at the large factory of the John Bull Rubber Co. Ltd. was causing condensation under certain climatic conditions and sections of the structure and floor were covered with moisture. This raised humidity and created unpleasant working conditions. Colt were called in and after a survey recommended the installation of Inflow Units and SR/3080 ventilators.

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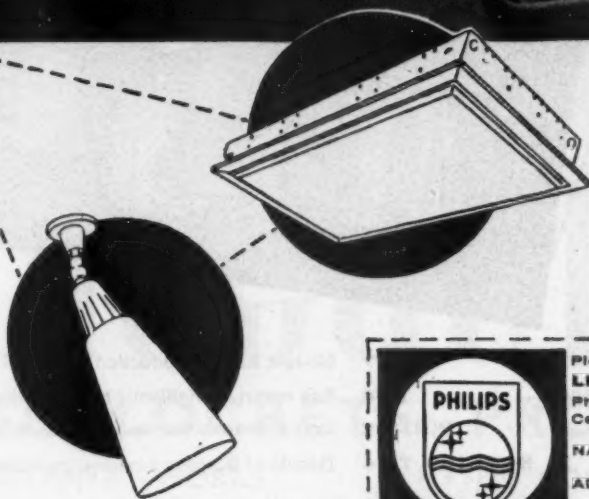
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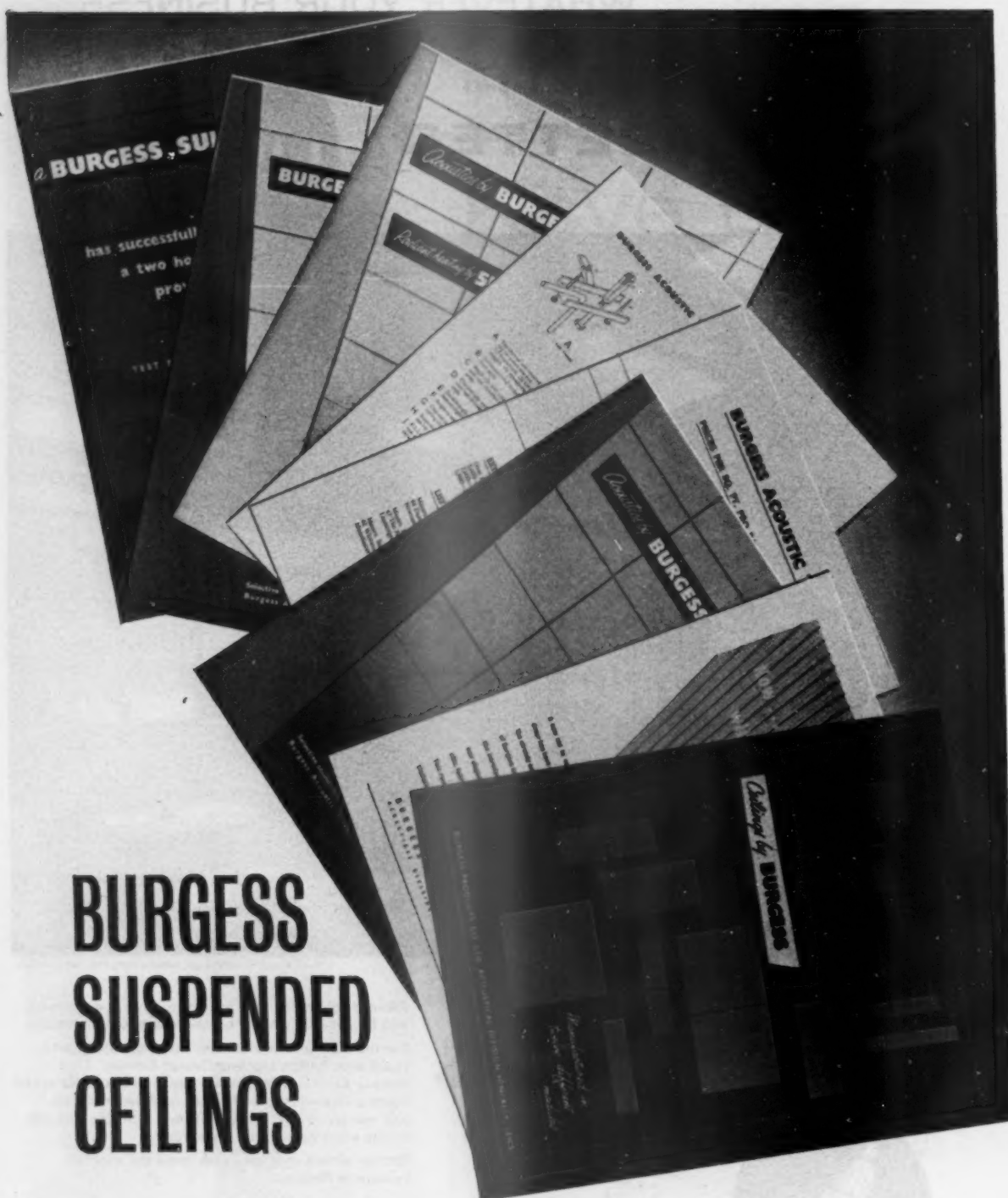
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# BURGESS SUSPENDED CEILINGS

**AT4a** Technical details, N.P.L. Report, and extract from Joint Fire Research Organisation report.

**ATH2** Radiantly heated by hot water.

**ETH1** Radiantly heated by electricity.

**AT7** Module sizes, introduction to Motif Tile.

**AT8** Fire report on Radiantly heated ceiling.

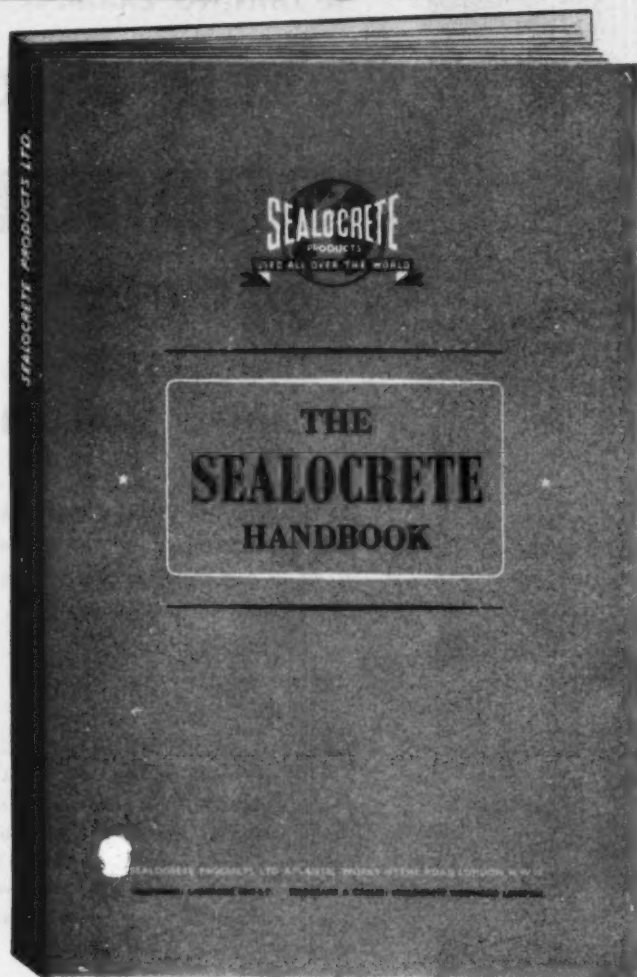
**RIBTILE** Introduction to the new Burgess Ribtile.

**SHEETS 1 TO 4** Details of Burgess suspension system.

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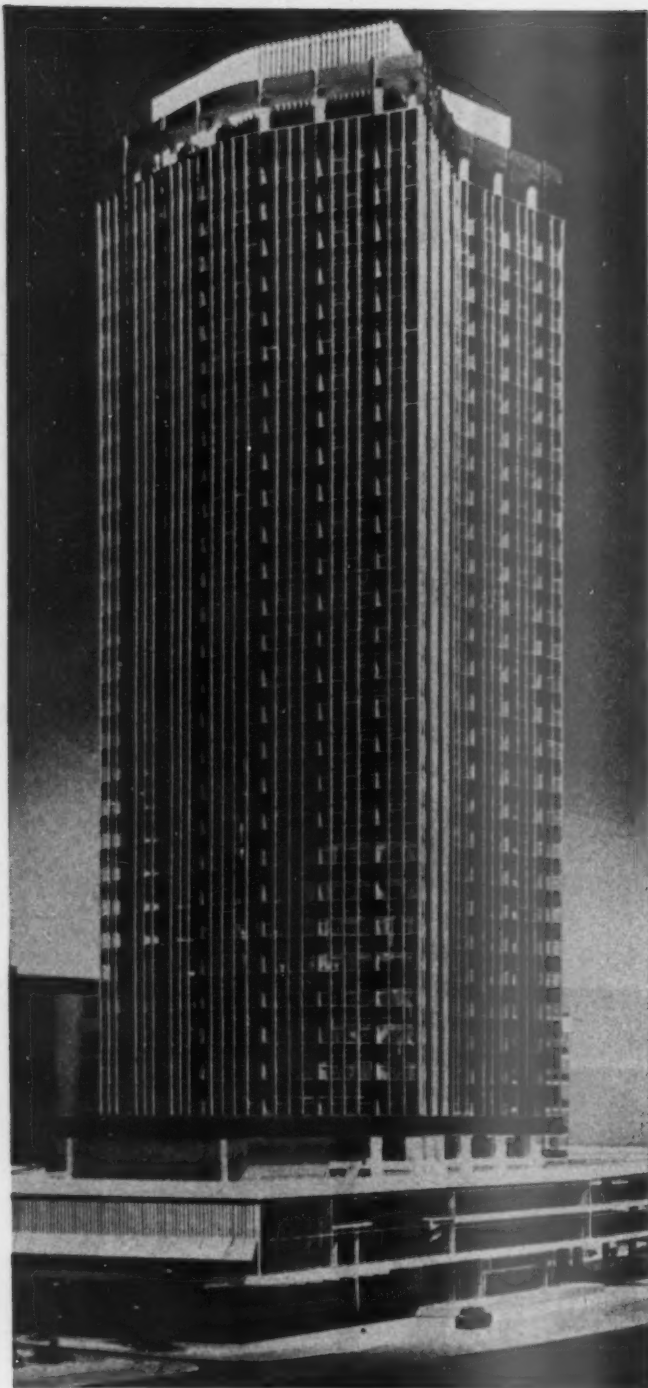
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*Contractors: John Mowlem & Co. Ltd.*

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## SOME EXAMPLES OF FINE TIMBER BUILDINGS

*Pavilions*

*Clubs*

*Schools*

*Libraries*

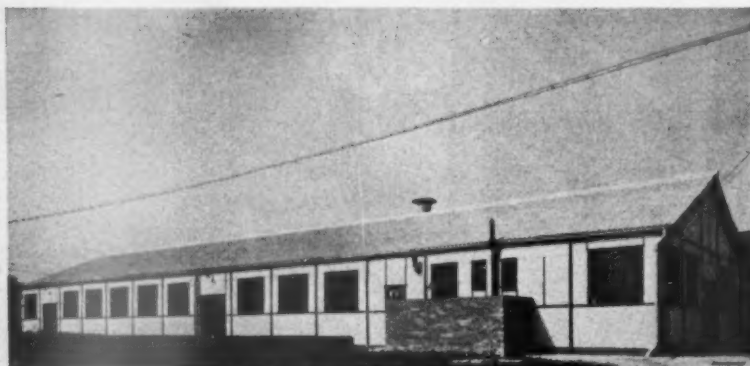
*Shops*

*Hospitals*

*Offices*

*Canteens*

*Showrooms*



Timber framed Factory Canteen.

Photograph by courtesy of Thomas Harrington Ltd., Hove, Sussex.



Temporary Services Block, 150ft. by 30ft. for Salisbury Cattle Market.

Photograph by courtesy of The City Engineer, City of New Sarum.



Classrooms at Fairford Farmor's Secondary Modern School.

Photograph by kind permission of The County Architect, Gloucestershire County Council.

Full details of these buildings, and all Thorns Building Systems are shown in their New Catalogue which is unique, in that it gives at a glance, sizes, prices, plans and specifications. It is available, free, to bona fide enquirers.

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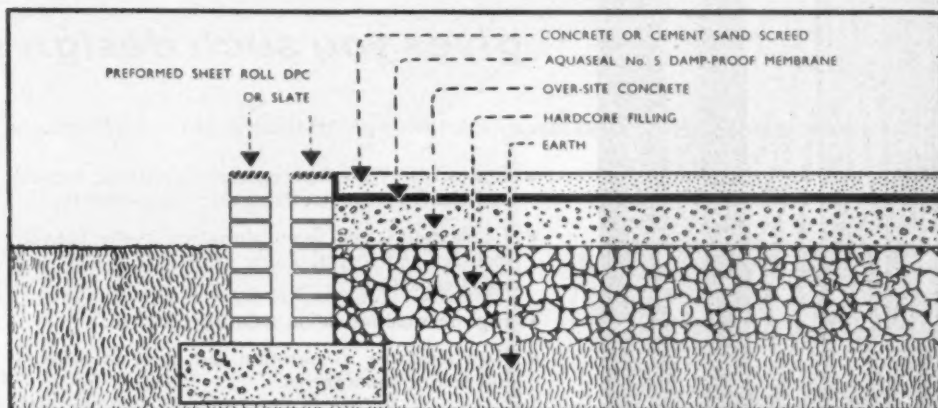
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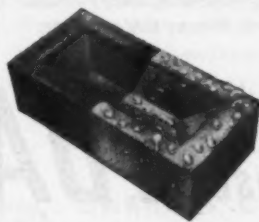
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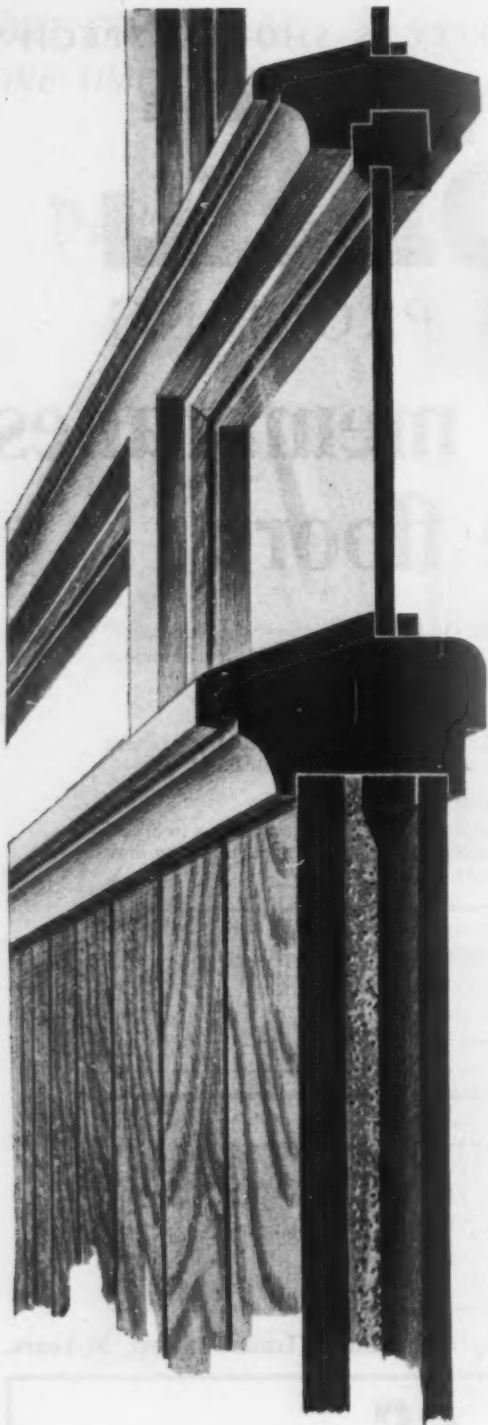
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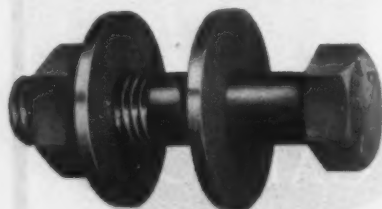


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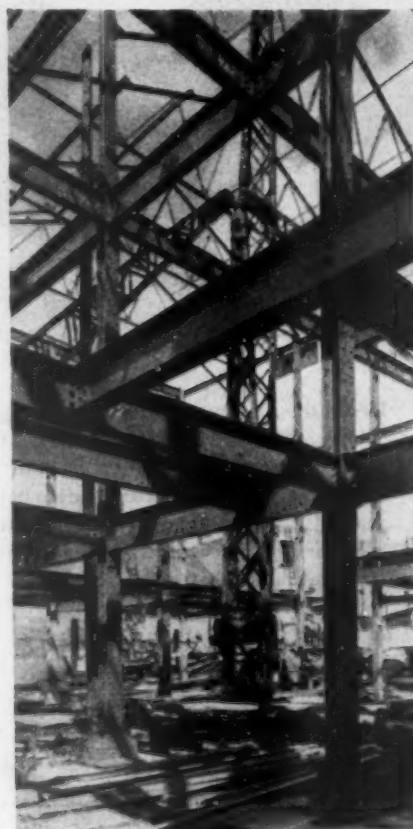
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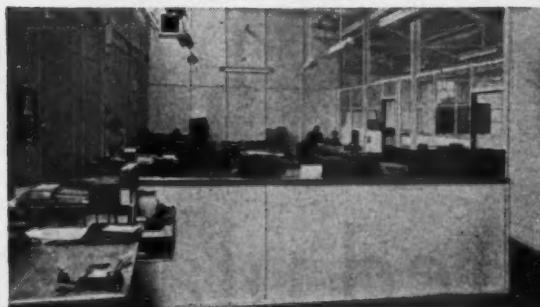
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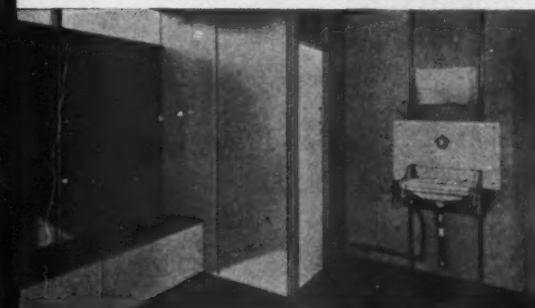
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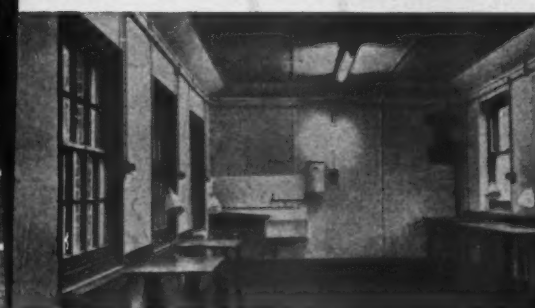
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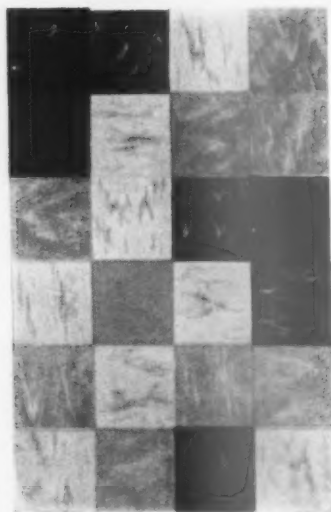


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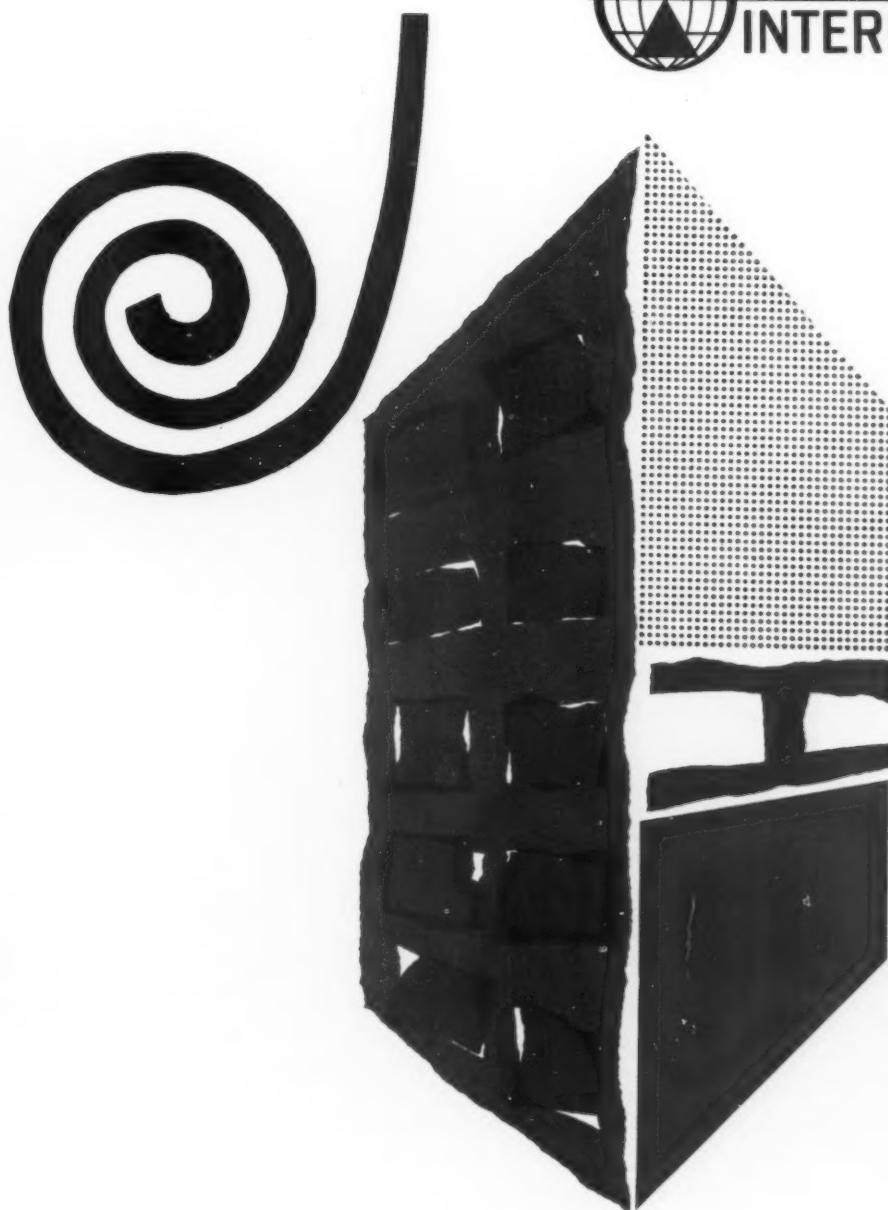
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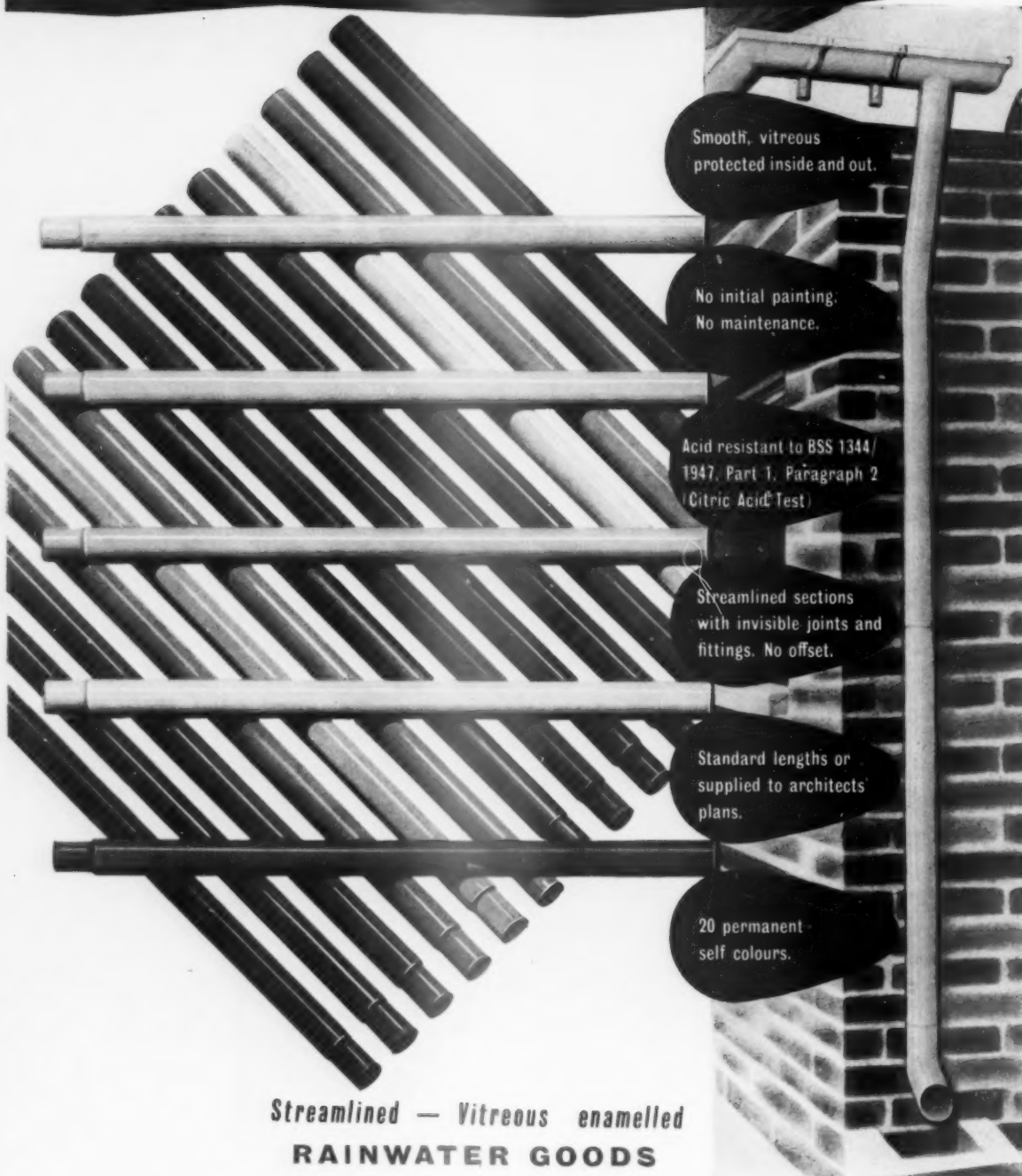
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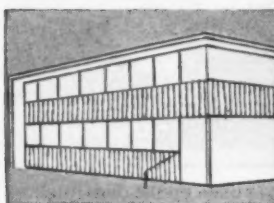
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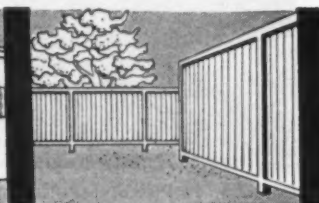
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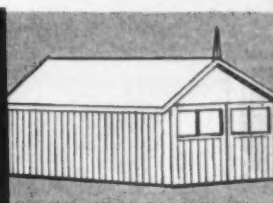
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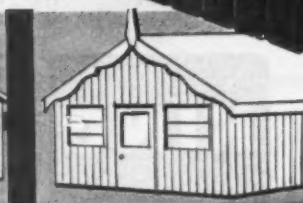
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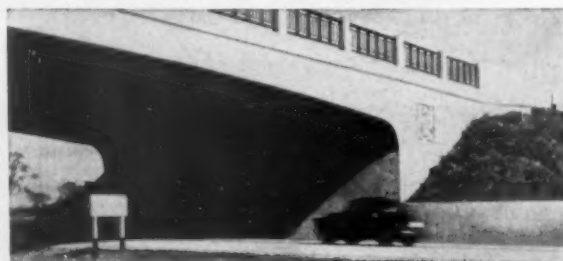
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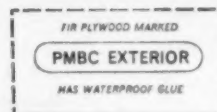
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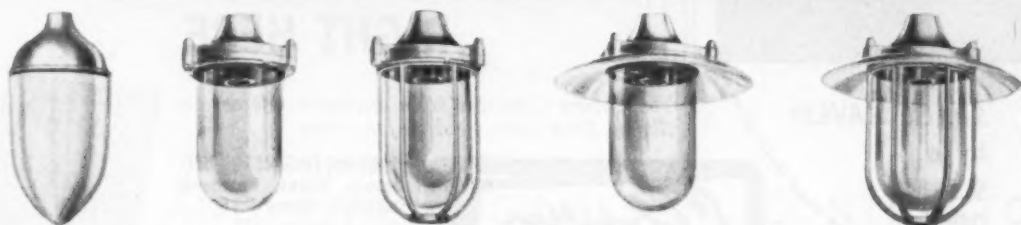
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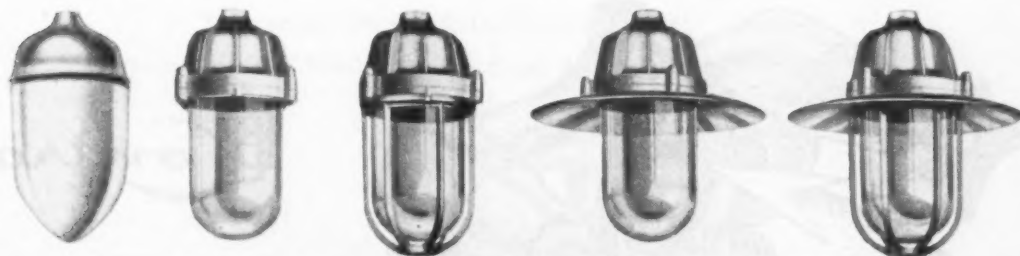
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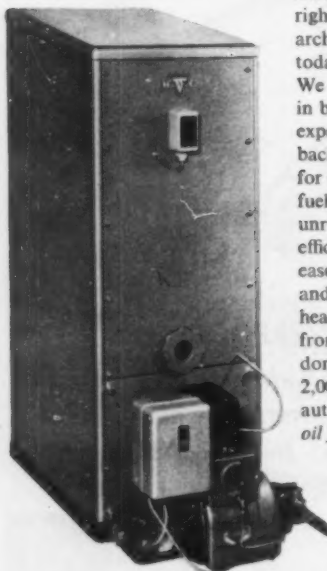
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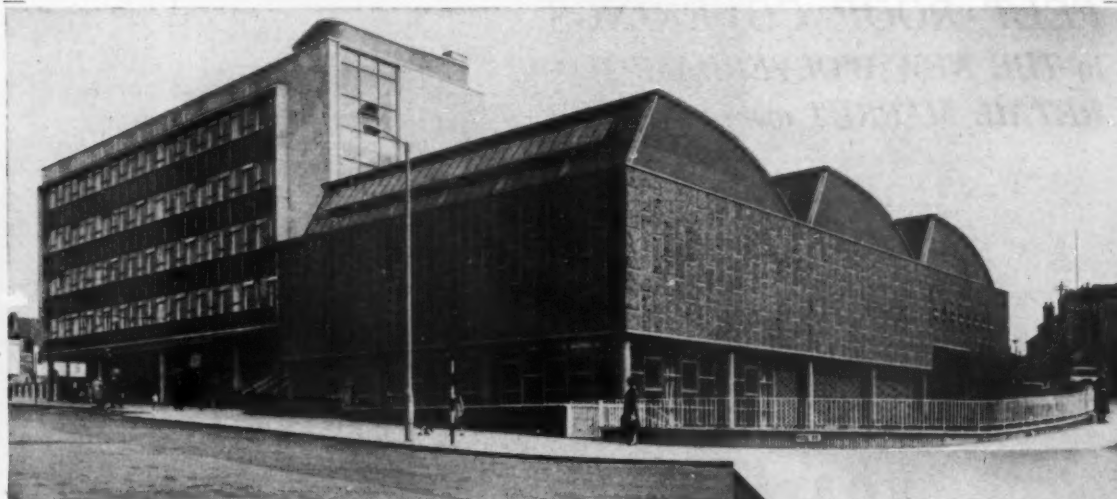
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*A. G. E. CHAPMAN, A.R.I.B.A., A.M.T.P.I.*

*Chief Assistant Architect:*

*N. C. DOWELL, A.R.I.B.A.*

*Architect In Charge:*

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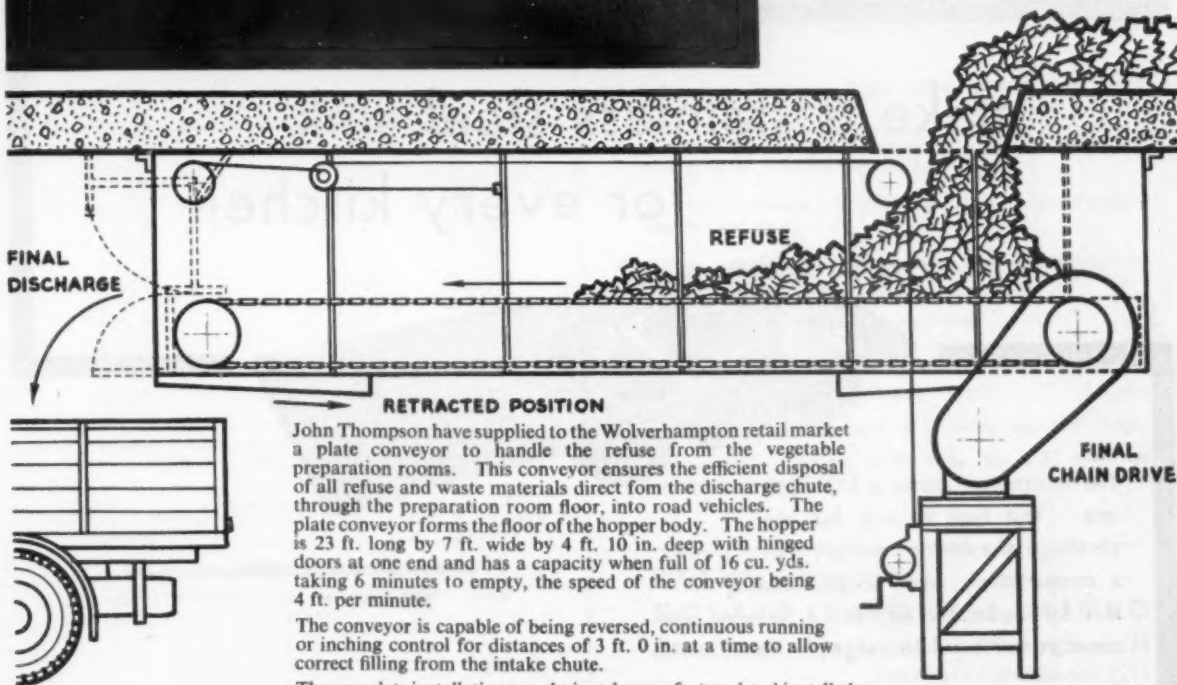
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General view of  
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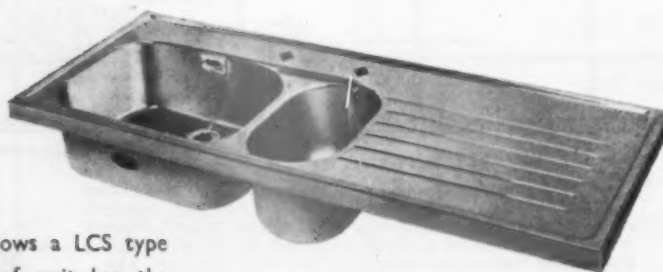
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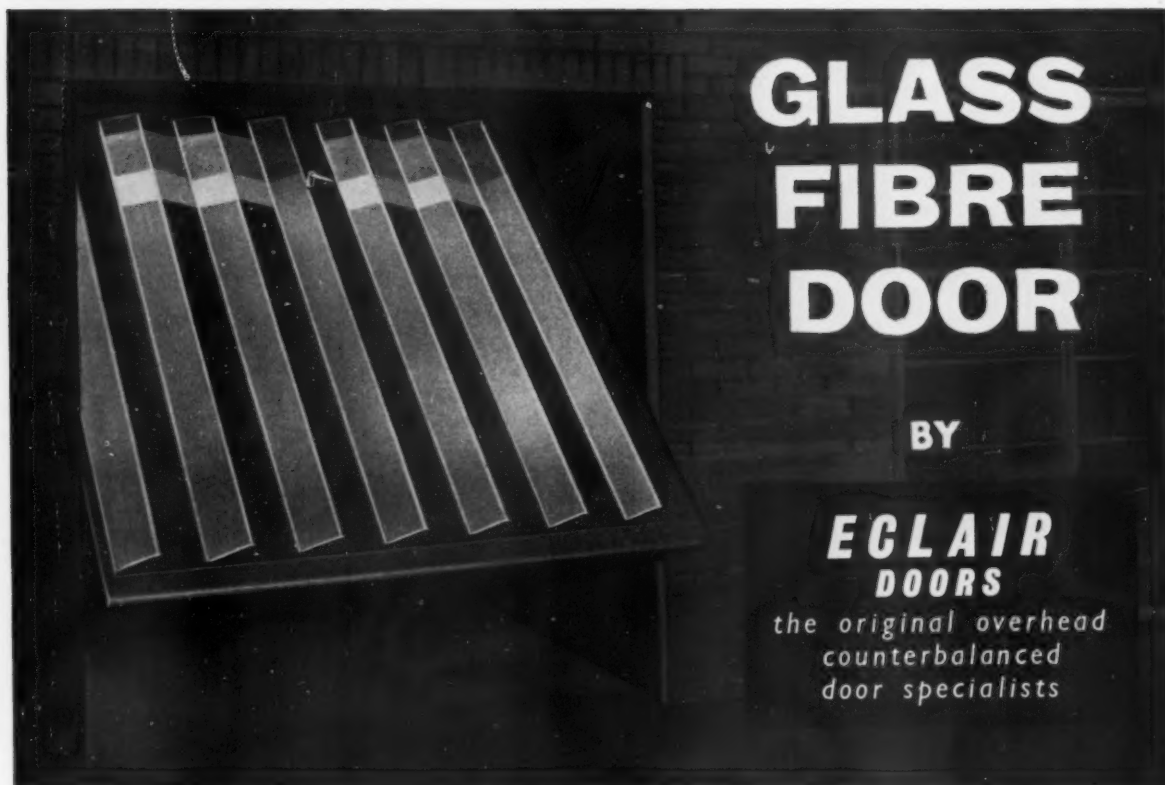
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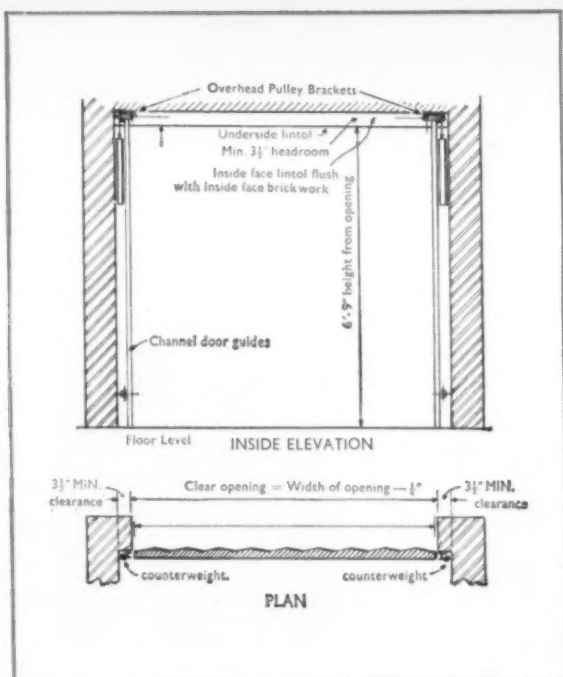


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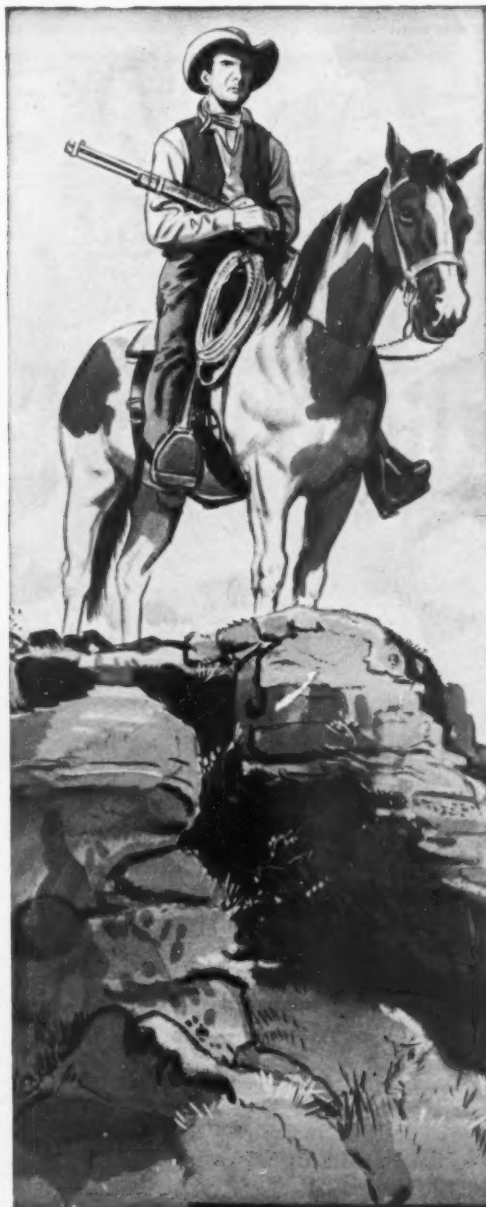
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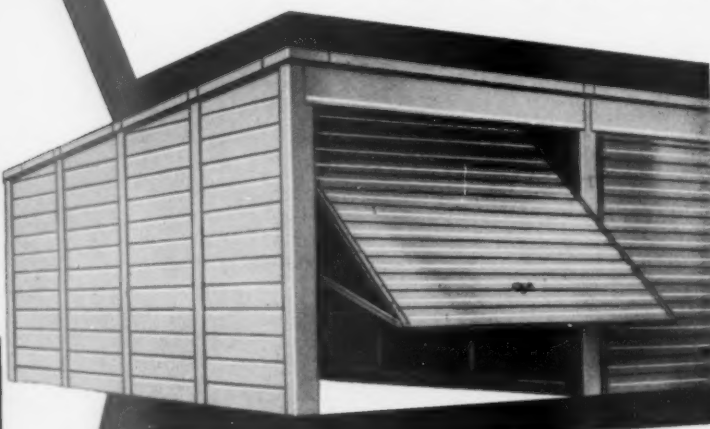
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## urban heliports

Now that aircraft designers have finally succeeded in producing a helicopter which is both safe and capable of being used for large-scale traffic movements, it seems certain that heliports will shortly be established near the centres of our large towns. On July 8, for instance, *Flight* stated that the Minister of Aviation, Mr. Duncan Sandys, would consider the report of a committee on the construction of a new heliport on the Thames at Nine Elms, Battersea, or at two alternative sites.

Important questions of public policy and amenity will be involved in the provision of new heliports. They are likely to carry very heavy traffic and will have to be sited conveniently close to the centres of population they serve.

We know from those living near an existing major airport what this may mean in terms of noise, disturbed living conditions and loss of sleep. Although the noise of a helicopter is not as shattering as that of a jet airliner, it can be extremely disturbing and no effective method of silencing is known.

This question of noise and the fact that large numbers of people will be affected in town centres makes the proper siting of heliports all-important. London, where the traffic will be great, is fairly fortunate in its aerial approaches. It has a wide river and estuary, pointing more or less in the direction of many of the nearer continental towns. It should be possible to site the new heliports on the river bank, or possibly even above the river, some distance away from office and residential areas. Other large towns, Manchester and Birmingham for example, lack this advantage, and the problem of siting will be more difficult.

The Government will have to ensure that consideration is given to the problem in all its aspects, in each case by means of careful preliminary surveys. Public inquiries no doubt will be held into each project, and the inspector should be from the Ministry of Housing and Local Government. As the planning ministry, it alone can reach a fair and impartial verdict taking all the factors into account.

Finally, there must be continuing research into noise in all its aspects: silencing techniques, bearable intensities of sound, insulation of offices and homes. How much of all this are the Department of Scientific and Industrial Research engaged upon?

On the Cover:  
Main crematorium  
block, Blackley Cemetery



### **Building research 1959**

The report of the Building Research Board, with the report of the Director of Building Research for 1959, has just appeared. It is a most interesting document which should be read by every architect, builder and student in the country. It is also readable. The report has some hard things to say about silicon-based stone preservatives, and some not very encouraging ones about translucent plastics sheeting and expanded polystyrene, where it is to be used as a vapour barrier. In the remarks on flooring materials, it is interesting to note that where the coefficient of friction between foot and floor exceeds 0.4, there is only one chance in a million that a person will be liable to slip. On a slope of 1 in 3, however, the coefficient of friction may be as high as twice that required on the level.

Hospital design being all the rage just now, the BRS will of course take part. Its particular worry is that the engineering services which go into a modern hospital can account for a third of the cost of the whole building. The station will seek cheaper ways of providing these services.

Computers are on their way into the building industry. The report says: "Where there is little restraint from the cladding against the sidesway of tall buildings and where, as a result, instability will be encountered, it becomes almost necessary to use the modern electronic computer to check the engineer's first designs."

In spite of all the complaints about damage from the vibration of jet aircraft, the BRS finds that no example has yet been encountered in which the vibration has approached the level considered to lead to structural damage to sound property, though there is a possibility that vibrations measured could have aggravated defects, particularly cracks in plaster. Aircraft flying close overhead, however, can produce what is officially classed as an "annoying" vibration of a house floor. On another aspect of vibration, the owner of a villa by a road much frequented by tanks complained that serious damage was being caused. The BRS carried out tests with three heavy tanks passing singly and together, and found that the maximum vertical vibration of the floor was 0.001in, as compared with the 0.002in of the aircraft passing overhead—"a vibration which, while undoubtedly annoying, was probably not even contributory to the structural damage, the cause of which was traced to other factors".

It is good to hear that the BRS has been working on the co-ordination of colours in manufactured articles. So far, about 20 firms dealing with such things as plastic, rubber or linoleum flooring, ceramic tiles and sanitary equipment, vitreous enamel cladding, office furniture and plastics laminates have already revised or are revising their colour ranges. Much otherwise useless weight goes into modern buildings in the form of sound insulating partitions. The BRS is hoping to investigate this problem by using specially designed experimental buildings.

Some people think that all manufacturers producing new materials have them tested by the BRS. This is very far from the truth. To begin with, the station has insufficient capacity to deal with everything that is produced even if paid to do so. However, the figure of 12 investigations carried out for manufacturers on repayment in 1959 does seem to be very low. Whether this was due to lack of capacity or demand the report does not say.

### **Preservers fall out**

The annual general meeting of the Chelsea Society was enlivened by hard words between the president, Lord Cadogan, and the chairman, Alderman Marsden-Smedley.

They were sitting next to each other on the platform. It appears that the alderman was having a pretty rough passage through the annual report. Lord Cadogan took exception to the reference to the new hotel in Sloane Street as "monstrous" and replacing "a row of Georgian houses, obliterating the houses formerly occupied by generations of thinking people". The houses, according to Lord Cadogan, were quite uninhabitable after being handed back from requisitioning.

As president of the society and also the borough's biggest developer, Lord Cadogan is in an unenviable position. His protest about the report may have been fully justified but on a vote the report was accepted by a very large majority. The trouble about amenity societies is that too often those opposed to change at any price outnumber the properly informed; in addition, they harbour in their ranks all those whose phobia against contemporary architecture is most acute. It was good, therefore, to see that Lord Conesford, a keen preserver yet a champion of modern architecture, stood up for the hotel and said that he was delighted that the Sloane Street area part of the Cadogan Estate had been comprehensively replanned by a first-rate firm of architects. In the end, Alderman Marsden-Smedley said he would withdraw any adverse reflections on the policy of the Cadogan Estates.

### **No. 10 Downing Street**

Work began last week on Raymond Erith's scheme for the reconstruction of Nos. 10, 11 and 12 Downing Street. To mark the occasion the Ministry of Works recently invited the press to see parts of the Premier's official residence. The Prime Minister had already left for Admiralty House but even so there was mild satisfaction in being allowed to park where his car usually stands. The crowd of sightseers was none the smaller for the house being empty. For all I knew they may have thought that the many representatives of the foreign press were statesmen attending a secret conference on the Congo.

The actual house of No. 10 is quite small and does not contain any of the important rooms used by the Prime Minister. These lie at the back of the building overlooking a pleasant garden and Horse Guards Parade. The rooms, which are surprisingly large, are part of what was once Walpole House. They are reached through a long pannelled passage, the walls of which are covered with photographs of Cabinets and conferences going back to the first war. That taken of the Cabinet in October, 1959, is certainly the worst photograph, but all are fascinating. The Cabinet room is at the end of the passage. It was already partly dismantled and only the heavy red brocade curtains and the faded pink carpet remained to keep the portrait of Sir Robert Walpole company. He was the first prime minister to use the room. In Walpole's day the room was sumptuously furnished and had a large Poussin of Moses striking the rock opposite the PM's seat. Now Walpole's portrait is the only picture.

This room, and the state rooms above it, will remain unaltered. It is right that this should be so. A modern setting would be unthinkable. The room without its long table seems small. It is not in the least pompous. Someone asked how long the table was. I felt like asking how many legs it had. A french window leads to a large terrace overlooking a spacious lawn surrounded by borders of flowers. It is all wonderfully unpretentious.

Before seeing the state rooms we visited the basement, still shored up against the possible collapse of the building from bombing. Between the shores we saw the stone



bearing the inscription which records the fact that King George dined there fourteen times during the war. Twice he had to adjourn to the shelter below. The shelter has several rooms and when I saw it I was strongly reminded of Michel St. Denis's wonderful description of Sir Winston Churchill on the eve of his broadcast to the French people in 1940. The shelter has two doors. The outer one looks like steel and has a wired glass inspection window and other fittings. It is, in fact, made of plywood and is hollow. The real door, 6in thick, is round the corner. An open cupboard revealed a pile of steel helmets. Evidently my family is not the only one unable to get rid of junk. A news hound was on to it in a trice. Did Sir Winston wear one of them? The guide did not know. Well, could he say that Sir Winston definitely did *not* wear one of them? No he could not. No doubt somewhere in the Sunday papers there was a report that Sir Winston may have worn one of the helmets in the pile.

A Victorian knife-cleaning machine aroused interest among foreign correspondents. The steel helmets, the knife cleaner and the green handsets of the scrambler telephones were somehow in keeping with the atmosphere of generations of national danger, state banquets and top secrets.

\* \* \*

The state rooms are reached by a handsome stair installed for Walpole. Engravings of statesmen flank it and, as someone pointed out, the higher you go the less hair they have, for you start with the full bottomed wigs of Walpole's day.

The Prime Minister sees all his papers in the Cabinet Room because his Secretaries' rooms are there. His study on the second floor is not really his office. It is a small comfortable room with a huge settee before the fire. In the ante-room is a table covered with signed photographs—Queen Elizabeth the Queen Mother, the King of Siam, Mr. Nehru and many others; and a large volume of photographs taken of Mr. Macmillan and Mr. Krushchev in Moscow with a model of a Russian jet airliner. On the wall are two water colours by Mr. Cosmo Clark, RA, director of the Rural Industries Bureau. The suite of large rooms for entertaining overlooks Horse Guards Parade;

*Inside the State Dining Room of 10 Downing Street, where renovations costing £500,000 are under way*



indeed a pile of programmes for the Queen's birthday parade was still lying on one of the tables. A small hole made by a bomb splinter in one of the internal folding shutters had been carefully framed and glazed. I felt somehow that Sir Winston had had a hand in that. The rooms are, as I have said, surprisingly spacious. They are beautifully furnished, mainly with Adam pieces. Fine paintings from the national collection hang on their walls. I noticed a Corot and a beautiful Guardi of the Piazza San Marco. There are two dining rooms, a small cosy one for seating up to 10 and a large one fashioned by Sir John Soane with dark panelled walls and a typical vaulted ceiling. Here, oddly enough, the pictures, portraits of some of the nation's heroes, are for the most part copies.

Following round on a conducted tour is not the easiest way of conjuring up the past but nevertheless, from time to time I remembered, with prickles down my back, the great men who had lived, worked, entertained and taken great decisions in these rooms. Until I saw the building I had some doubts about the wisdom of spending what seemed to be a large amount of money on reconstructing a building of comparatively little architectural importance. I now see that it was absolutely the right decision. To have done otherwise would have been to destroy 200 years of history. It is, too, a sad comment on contemporary architecture that a modern setting would be entirely out of place as a background to the British Prime Minister and his Cabinet.

### *The late Howard Cavanagh*

Howard Cavanagh, architect to the Western Region of British Railways, lost his life in a sailing accident off the Isle of Wight on August 3. His death is a considerable loss to railway architecture. It is very sad that he did not live to see the completion of his new station at Plymouth which is illustrated in this year's Royal Academy Summer Exhibition. Like most railway architects today, Mr. Cavanagh's work consisted of planning big jobs for the future while having to be content with carrying out the smaller ones; a frustrating situation which he bore very well.

Mr. Cavanagh was born in India in 1909 and educated at Clifton College and the AA. He worked for a number of London architects, including Graham Dawbarn, before setting up in private practice in 1937. He joined the City of London Yeomanry in October, 1939, and after being commissioned into the King's Regiment, was transferred to the Parachute Regiment in August, 1942, and posted to the 6th Battalion (Royal Welch) in April, 1943. He served in North Africa, Italy and Greece, and was demobilised in October, 1945, with the rank of Major. He joined the old Great Western Railway Company on his release from the army, was appointed assistant architect in 1947 and architect in 1949.

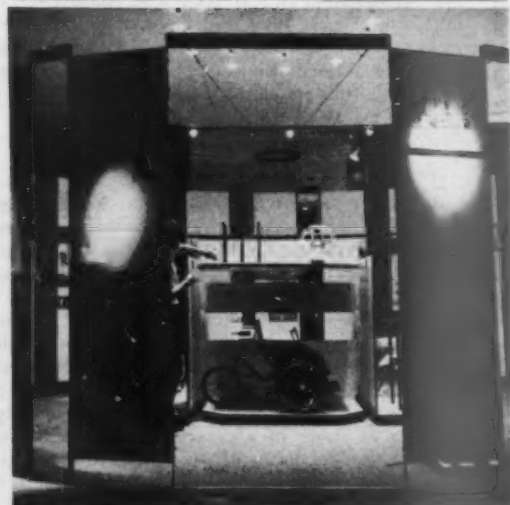
\* \* \*

Cavanagh was a tough sportsman. A keen rugby player in his day, he was also interested in rock-climbing, skiing, sailing, vintage cars and photography. His great interest, however, was cricket. He was playing this season in an office team which he ran.

Like many strong and courageous men, Cavanagh was a very quiet person to meet. He was earnestly devoted to his work and always an architect rather than an administrator. Though Plymouth Station may be his most important monument, I shall remember him best sitting in the refreshment room of a reconstructed junction station in South Wales, the design of which seemed to me to combine the best of the traditions of railway architecture with modern practice and materials.



Above, the U.K. school, one of two buildings sited away from the main exhibits housed in the Palazzo del Arte. Below, one of the Italian show flats and, under this, the R.C.A. exhibit. Photographic panels are arranged in a circle, with students' design at the centre



ALTHOUGH the twelfth of its kind, for most architects, who have hitherto been confined by travel restrictions, this will be the first opportunity for them to attend a Milan Triennale. It is less likely, therefore, that they will be disappointed, as some of their trans-Atlantic colleagues seem to be, at the new course which has been set by those responsible for the planning of this one. For although the beautiful Parco Sempino is still there, but is no longer exploited as a setting for gems of international architecture in the form of pavilions designed to advance the prestige of different countries, it still provides an admirable locale for such an exhibition. With the exception of the two buildings which exemplify this year's "theme" of the home (a pre-fab building by Alcoa out of Ford) and the school (this being the renowned Nottingham "rock and roller") everything is housed in the Fascist neo-classic bulk of the Palazzo del Arte.

For those who prefer not to struggle with crowds, now would be the best time to go. Many of the Milanese, including the architects, are away on holiday and by this time the U.S. Pavilion, which was supposed to have been erected in two days but which was still perched in the air on wobbly concrete piers a week after the opening, should have the necessary fill shovelled in underneath it and be completed and properly landscaped. On the other hand people whose holidays are staggered and who suffer from heat (Milan is very hot at this time, but most people make their lunch hour last three hours) may prefer to go later in September or October. The exhibit is not due to close until November 4.

The sleepy-eyed traveller who has achieved the dubious economy of the night flight will find, as he approaches Milan on the hour-long trip from the airport to the city, that he searches in vain for a sight of Milan's latest skyscraper—the Pirelli building. However, when he finally arrives at the central terminus and emerges from this Mussolini monster he will be rewarded by the sight of the splendid tower no more than 300yd away. Later, if he is fortunate, he may go on a conducted tour of the building and will have the opportunity, denied him in the plane, of seeing what Milan looks like from above.

At this point, the first thing anybody ought to do if they are unfamiliar with Italy's major industrial city is to buy a map, for it is very easy to go round in circles in Milan, the core of which conforms to the pattern of most nuclear medieval cities.

The architects at the Triennale have contrived most successfully to remove the curse of Fascist influence from the building in which the exhibit is housed, but in doing so may cause a certain amount of confusion. Although the intention was to create an "itinerary", in fact, the visitor will be faced with a number of rather bewildering alternatives. One of these, consists of a room which has already been christened the "graveyard" where an attempt has been made to show the possibilities of integration between art and architecture, with a series of slabs at floor level which consist of photomontages and sculpture interspersed with panels of mosaic and stained glass design. These are scattered around in such a way as to make progress for one person quite difficult, and lead one to speculate what will happen when there are large crowds trying to side-step their way through this area.

Most people will be entranced by the Swiss exhibit which consists almost entirely of a triple-projected film shown in a small curtained auditorium close enough to the main circulation so that visitors are enticed by the sound of music. The film itself is an excellent documentary on life in Swiss schools. Just what is gained by the simultaneous viewing of three separate films on three screens is hard to say, but, nevertheless, the effect is extremely stimulating, and owing to the skill with which they have been co-ordinated, quite easy to follow. Others may wonder, with some justification, what connection, if any, is to be found between the "home and the school" as interpreted by some of the other 16 participating countries. Was the very charming ceiling of the room in which Danish furniture is displayed merely for this occasion or has it a special significance in connection with schools? Extravagant birds which catch the eye of the visitor to the Finnish exhibit may be decorative but scarcely seem appropriate for either home or school furnishing.

The Japanese show some very good, simple school furni-

ture, but beyond this their contribution seems mainly to consist of consumer goods such as cameras, T.V. sets & optical instruments which are charmingly displayed in a setting of floating floor planes.

The French seem hardly to have realized what the purpose of the Triennale was and the presence of a kitchen cabinet with built-in sink set-up, revolutionary as it may be in that country, hardly justifies the reappearance of repellent trends in furniture and interior design so reminiscent of the twenties' and thirties'.

Countries which seem to have made a serious effort to put forward ideas relevant to the established "theme" are Belgium, Czechoslovakia, and Mexico. The last of these, with problems of school building in rural areas under climatic conditions frequently similar to those of Italy, displays a pre-fab classroom which combines the advantages of mass production techniques with a degree of rustic charm.

Emerging from all this to what is undoubtedly the climax of the whole show, the British school building, it was reassuring indeed to see such solid proof of the advantages to be gained from pre-fabrication, modular co-ordination, site assembly, etc., etc. There is absolutely nothing to suggest that this is not a permanent structure. Though the site is somewhat restricted (and one is made more aware of this by the only obviously impermanent feature, namely, an aggressively cheap-looking wire fence, which, together with the rickety-looking bridge leading from the main building, appears to have been run up by the maintenance men as an afterthought), the architects have managed to convey the manner in which outside space adjacent to the building, so important in a school, has been developed both from a functional and aesthetic standpoint. Furnished ready for active use, the rather ghostly illusion that children are not far away is further heightened by the sound of their voices at play coming from a hidden tape-recorder.

A perfect example of the skill which the Italian architects have applied in making an outmoded building serve as a setting for contemporary ideas is the way in which they have made use of the main staircase as an introduction to their own exhibit, which occupies the entire upper floor. Instead of the usual balustrade both exposed sides of the divided stairway are flanked by black-painted steel stands used for the display of cutlery, glass, etc. These are brilliantly lit, and since very dark tones are used for the walls (dark hemp carpeting muffles the easy-going stair treads), the objects stand out in sharp detail. The only other source of illumination is that reflected from the light tones of a painted ceiling which floats above the entire stair well.

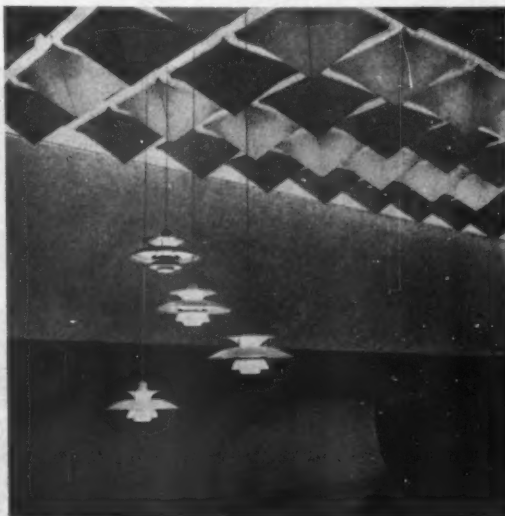
After sidling through a circular chamber whose inward-bellied canvas walls and convex ceiling somehow managed to suggest the interior of a flying-saucer (it was noticeable that nobody took advantage of a rather grisley-looking row of dentist-type chairs and readied for the take-off), the visitor now finds himself walking past a series of "sunken" rooms. These may comprise an apartment in the country, or a rural school-room. Alternatively one may be a home on the outskirts of a big city, while another will be a typical flat in a tall apartment building in the centre of town. This is achieved by means of a "gimmick" whereby the general floor level is raised up to the level of the window sills of the original building, so that the tall windows now go all the way to the floor, making it possible to walk round and view the interiors without having to circulate through them.

Anyone conscientiously following his exhibition guide may also be tempted to penetrate two interior spaces devoted to statistics and diagrams about school construction in various countries. He is not likely to linger long, however, unless either someone has introduced air-conditioning for these areas or the weather has cooled off considerably.

For those who may be particularly interested, the rather exhaustive retrospective exhibit devoted to Signor Olivetti, and the equally comprehensive memorial exhibit of the work of Frank Lloyd Wright are there to be viewed by those with eyes still capable of seeing and legs left to support them. The latter particularly is likely to receive attention since it is on the way to the comfortably furnished, discreetly lit verandah bar which the planners have been thoughtful enough to air-condition. As good a place as any to end the day and this article.



Top, the French section, designed by architect Herbst, and under this, three cane and metal chairs in the Polish section. Below, part of the Danish section designed by Paul Kjaerholm





### RIBA examination results

Of 267 candidates for the RIBA's final examination—held in London, Leeds, Manchester, Newcastle, Edinburgh and Belfast from June 8-17—115 were successful, as follows: Passed whole examination, 82; passed whole examination, subject to approval of thesis, 1; passed part 1 only, 32. A total of 142 candidates were relegated. The successful candidates were:

**For the whole examination:**—Abraham, Paul; Agebeg, G. R.; Altmann, F. R. (distinction in thesis); Anstead, E. T.; Bates, Donald; Beach, L. J.; Boram, D. H. R.; Brewer, Max; Browning, A. J. H. (distinction in thesis); Campbell, I. G.; Claxton, K. G.; Connolly, P. R.; Courtenay, B. L.; Cowen, C. N.; Creedon, Robert; Croft, H. K.; Daniels, J. E. J.; Davies, G. W. J.; Deighton, G. K.; Donald, Kenneth; Ede, A. J.; Ellis, G. W.; Fearnley, J. V.; French, P. J.; Gardner, Richard; Garrett, J. B.; Gilbert, D. J.; Goad, D. I.; Gray, G. A.; Gray, P. D.; Green, D. S.; Griffith, Dennis; Hawkins, G. J.; Haywood, Ian; Heelis, Gordon; Higgins, C. G.; Hodges, T. K.; Honer, J. D.; Hunter, James; Isaac, A. R.; Jeavons, G. R.; Joiner, L. A.; Jones, Frank; Jones, G. A.; Jones, R. A.; Kerrigan, P. M.; King, D. E.; Kinloch, I. W.; Lewis, G. R. C.; McIlwaine, D. E.; McTaggart, R. M.; Marsh, M. J. (distinction in thesis); Meyer, H. I.; Miller, R. A.; Millis, A. P.; Morris, G. M.; Morrison, L. D.; Mountain, Brian; Owen, Leslie; Perini, Luciano; Philip, D. S.; Porter, J. E.; Preston, D. I.; Price, J. F.; Prosser, D. I.; Rajendram, Rosiah; Rawson, F. K.; Renhard, J. T.; Richardson, J. M.; Roberts, K. M.; Senkowsky, H. E.; Simpson, R. G.; Sims, J. G.; \*Smith, Harold; Smith, J. P.; Smith, Raymond; Stuckey, R. B.; Trajer, Janos; Way, J. L.; Wells, Alec; White, D. H.; Wood, R. K.; Woodford, B. M.

\*Subject to approval of thesis.

**For part 1 only:**—Andrews, B. H.; Bienias (Mrs.), Barbara; Butler, J. S.; Chohan, B. A.; Cornish, J. C.; Curran, M. G.; Davies, J. E.; Davies, R. C.; Farquharson, James; Gibbon, John; Goodwright, A. R.; Grand, Reuben; Jones, E. C.; Joyce, R. W.; Miller, Keith; Moody, J. A.; Myatt, Ian; Pearson, C. D.; Pomeroy, W. G. I.; Pope, F. M.; Price, K. J.; Pritchard, A. F. J.; Robbins, G. L.; Roberts, R. J.; Rosie, T. A.; Royle, J. M. A.; Ruggles, G. F.; Schofield, A. W.; Shepherd, M. C.; Swallow, I. G. T.; Willars, D. T.; Wilson, D. W. A.

The Special Final Examination was held in London, Leeds, Manchester, Newcastle and Belfast from June 8-17. Of the 144 candidates examined, 39 passed, as follows:—Passed whole examination, 34; passed part 1 only, 3; passed part 2 only, 2; 105 candidates were relegated. The successful candidates were:

**For the whole examination:**—Allen, F. D.; Ashfold, B. A.; Bannister, W. G.; Bell, J. R.; Benjamin, W. H.; Blackwood, B. G. W.; Brown, Geoffrey; Cooper, Denis; Davies, T. A. R.; Davis, E. R.; Dryburgh, K. A.; Edmonds, N. A.; Fuller, R. C.; Grubb, G. E.; Harding, C. M.; Harrison, Godfrey; Hill, D. S.;

*Model of a £2 million landscaped residential estate at St. John's Wood, London, being developed by Norwich Union Insurance Societies. It comprises four blocks of flats, two with eight- and eleven-storey wings and 17 houses. Architects: T. P. Bennett and Sons*

Joel, S. V.; Jones, G. H.; Knowles, W. C.; Lieberman (Mrs.), Maria; Lutowski, Mirosław; Mew, V. J.; Murray, C. R.; Ridgett, J. W.; Seddon, Fred; Smith, R. C.; Stancel, Jan; Taylor, E. N.; Taylor, S. D.; Walden, Derek; Wild, L. A.; Wixey, L. W.; Zehetmayr (Miss), J. F.

**For part 1 only:**—Marshall, D. G.; Moore, T. J.; Nekanda-Trepka, Janusz.

**For part 2 only:**—Jones, R. W.; Rule, J. W. G.

### Smoke-control programmes

Of 324 authorities suggested to be "black areas" and asked in a circular to submit smoke abatement programmes to the Ministry of Housing and Local Government, 85 had not responded by March 31 this year.

Of these 21 stated that they did not consider their districts to be black areas, and 30 said they were concerned about the effect of smoke control orders on persons entitled to receive coal at concessionary rates. Most of the others stated that they had not yet been able to prepare a programme of domestic smoke control, or that they wished to proceed with a pilot scheme before doing so. The circular was issued in January, 1959, and it asked for programmes to be submitted for each year up to 1963.

A Command Paper\* giving details of those programmes submitted was presented to Parliament recently. It shows that by the end of 1958 some 120,000 premises and 17,000 acres in the black areas were covered by smokeless zones or smoke control orders. Estimated progress in 1960 (470,000 premises and 111,000 acres) is about double that estimated for 1959, and the programmes envisage that something like this rate will be maintained in each year up to 1963.

This would mean that some 2,250,000 premises, including 2,000,000 houses and nearly 500,000 acres would by then be smoke-controlled, almost half way towards the objectives of those councils which had submitted programmes. The rate of progress in 1959, however, fell a good deal short of what had been planned.

Target dates for completion of local authority programmes range from 1962 onwards. The County of London, it is estimated, will be largely smoke-controlled by 1975.

\* *Smoke Control: Summary of programmes submitted by local authorities (Cmd. 1113, HMSO, 3s.)*

### Oxford's road schemes

An early inquiry into Oxford's plans for roads to relieve traffic congestion has been promised by the Minister of Housing and Local Government. Mr. Brooke has stated that the inquiry will be concerned with the council's three comprehensive schemes or any permutation of parts of them. He will also be prepared to consider any other schemes put forward.

Plans showing the council's schemes will be available for inspection. They comprise the Duncan Sandys Meadow Road, the Abercrombie ring and the road, so far adopted by the council, extended down Bulwarks Lane and along Water Street to the northern end of St. Giles.

### Edinburgh architects' protest

A decision to employ contractors in preference to architects on Edinburgh redevelopment schemes has been attacked by Edinburgh Architectural Association. The schemes concerned are for the replacement of 4,000 prefabs by 9,000 flats at a cost of about £18 million.

The association secretary, Mr. T. G. Salmon, told *The Scotsman*: "This work would appear to come well within the professional scope of the architect's normal practice. The exclusion of the architectural profession will probably result in no financial saving to the corporation as, in effect, they will just be paying design fees to the contractor instead of to the professional architectural designer."

"I am advised that a further result of the decision may be the virtual exclusion of almost all the local builders, who are city ratepayers, as they normally work to plans prepared by professional architects."

"Some councillors might not be aware of the implications of this decision," he added. It was hoped it would be





reversed, and that the council would again follow the normal practice of employing architects for new schemes.

Councillor Norman Smith, convener of the housing construction sub-committee, said: "We felt that in these projects, which involve not only planning and building, but demolition or removal of the existing houses and alteration of site levels, a contractor would be better able to do the job. The contractors will employ their own architects and surveyors."

### Pyramid shapes in new LCC school

Twin pyramids provide a novel feature of a new LCC school in St. Marylebone, called the Rutherford Secondary School for Boys. One of the pyramids forms the roof of the main assembly hall (see picture) and the other is an inverted one on the roof of the main teaching block. It houses the water tanks.

The school, which has been described as "a comprehensive school without an arts sixth", will accommodate 800 boys between the ages of 11 and 19. It provides a sharp contrast with the dingy buildings around, particularly with the adjoining Bellfield School, which will be demolished as soon as the new school is finished and will provide a playground. With the demolition of many other buildings in the neighbourhood and the construction of the flyover from Marylebone Road to Harrow Road, the area will acquire a new look.

In preparing their plans for the building, Leonard Manasseh and Partners found themselves completely dictated by the site. With Bellfield School remaining in use and taking up a quarter of the available area, they had to adopt an L-shaped solution. The assembly hall and two gymnasias form one block, and everything else, including the caretaker's house, is contained in a three-storey teaching block nearly 100yd long.

Planting and landscaping is restricted to lawns and a pool outside the administration area, a few trees on the periphery and two paved courts between the teaching block and assembly hall.

### Conference on church design

Church architecture has been assailed in many quarters recently, which gives point to a residential and non-residential conference being held by Liverpool University's Department of Extra-Mural Studies from September 19-21.

The conference will discuss *New Church Architecture*, with lectures by A. H. Couratin, principal of St. Stephen's house, Oxford, Peter Hammond, secretary of the New

Churches Research Group, Judith Scott, secretary of the Central Council for the Care of Churches, Dewi Prys-Thomas, a senior lecturer in architecture at Liverpool University and William Lockett, staff tutor in fine arts in the university's Department of Extra-Mural Studies.

### Grants for repairing churches

Architects asked to advise on the repair of old churches may like to be reminded of the existence of the Historic Churches Preservation Trust, Fulham Palace, S.W.6.

Since its creation in 1952 the Trust has made more than a thousand grants averaging £400-£500 to help in the repair of old parish churches. Prosperous architects paying income tax at the full rate might even like to help the good work by entering into seven-year covenants.

### LMBA director retires

Mr. G. H. A. Hughes, O.B.E., for 16 years director of the London Master Builders' Association, retires on August 31. Many tributes to his outstanding service have already been paid, not only by builders, but by everyone connected with the industry with whom Mr. Hughes has come into contact. The LMBA are proposing to honour Mr. Hughes by inviting him to be their guest at a cocktail party in the Carpenters Hall on November 10.

### Retirement of Mr. R. J. Hunt

After 13½ years on the staff of the London Master Builders' Association, Mr. R. J. Hunt retires from the post of area secretary on August 31.

He joined the LMBA in 1947 after four years with the South-Western Federation, and in addition to his duties as an area secretary Mr. Hunt, with his wife, has been concerned in the administration of the Builders' Benevolent Institution. All the areas of the LMBA of which Mr. Hunt has been secretary have expressed their appreciation of his services and the good wishes of their many friends in the building industry for a long and happy retirement have been conveyed to him and his wife.

### Management conference

A director-level only management conference for the heads of building firms has been arranged by the Building Advisory Service, on behalf of the National Federation of Building Trades Employers, to take place at the Waldorf Hotel, London, on October 11 and 12.

The subjects to be dealt with will include the functions of management, human relations, work study, planning, training and development of executives, incentives, management accounting and communications.

Applications for places on the course should be addressed to the Building Advisory Service, 82 New Cavendish Street, London, W.1. The fee for each delegate will be £7 7s, to include lunch and light refreshments on each day. The

*continued overleaf*

The new LCC secondary school in St. Marylebone, showing the pyramid of green slates over the main assembly hall. The old school, which is to be demolished, and other residential development, may be seen in the background (story this page)



## diary

### The Architectural Association

August 24, at 6.15 p.m. Illustrated talk for visiting overseas architects and students. "The Secondary Modern School, Richmond, Yorkshire", by D. C. Hall. "A Primary School", by David Medd. At 36 Bedford Square, W.C.1. Admission by ticket only, obtainable by letter or telephone (MUS 0974).

### Town and Country Planning Association

September 17. Visit to Hatfield and Harlow New Towns.

### Royal Institution of Chartered Surveyors

August 30-September 3. Chartered Surveyors Annual Conference at the University College of North Wales, Bangor.

number of places on the course is strictly limited and early application is advisable.

#### Booklet for young architects

Boys and girls who are likely to be suitable for careers in architecture often show, while still at school, an observant awareness of their surroundings, and enjoy sketching the buildings they see, states *The Architect*, a revised booklet in the *Choice of Careers* series.

Issued by the Central Youth Employment Executive, the booklet is illustrated and describes, in non-technical language, the day-to-day work and responsibilities of architects and their assistants. It discusses some of the basic ideas underlying all architecture, but does not attempt to give detailed technical information of the kind that can be found in textbooks.

#### Liverpool College of Technology

A tender of £1,112,500 for the erection of the second instalment of the city's new College of Technology has been accepted by Liverpool Education Committee. As the figure exceeds by more than £250,000 the amount the Ministry is prepared to allow, however, the committee will approach the contractors to see if reductions can be made.

#### Golf win for MoW

The Ministry of Works held a commanding 6-2 lead in a golf match with the London Master Builders' Association at Weybridge recently, and although the builders had the better of the afternoon exchanges, the Ministry were victorious by 9-7. Scores:

Morning			
Ministry of Works	Result	Builders	Result
A. J. Filer (24)	0	P. H. Bates (12)	1
A. L. Barclay (14)	0	E. J. Cook (Capt.) (16)	0
K. J. Jarvis (5)	1	P. A. Adams (6)	0
S. G. Foster (7)	1	H. Cowan (8)	0
A. R. Barrett (5)	1	T. E. Yeomans (10)	0
I. Flower (14)	1	J. H. Catt (18)	0
J. C. Belsey (11)	1	A. G. Miles (17)	0
E. L. Hutchinson (12)	1	K. A. Rose (18)	0
J. F. Goldsmith (12)	1	W. B. Barrett (14)	0
G. R. Fellowes (10)	1	W. L. Makin (21)	0
P. H. Ogle-Skan (Capt.) (15)	1	F. A. Wallis (20)	0
R. C. Miller (15)	1	G. A. Hill (13)	0
G. W. H. Younger (16)	0	Barry High (20)	1
J. F. Turner (18)	0	K. R. Atkinson (16)	0
C. W. Bungey (16)	1	L. A. Murray (15)	0
R. M. Harvey (11)	1	C. A. Diebel (7)	2
	6		2
Afternoon			
A. J. Filer	0	P. H. Bates	1
A. L. Barclay	0	E. J. Cook	0
K. J. Jarvis	1	P. A. Adams	0
S. G. Foster	1	H. Cowan	1
A. R. Barrett	0	T. E. Yeomans	1
I. Flower	0	J. H. Catt	1
J. C. Belsey	0	A. G. Miles	1
E. L. Hutchinson	0	K. A. Rose	1
J. F. Goldsmith	0	W. B. Barrett	1
G. R. Fellowes	0	W. L. Makin	1
P. H. Ogle-Skan	0	F. A. Wallis	1
R. C. Miller	0	G. A. Hill	1
G. W. H. Younger	1	Barry High	0
J. F. Turner	1	K. R. Atkinson	0
C. W. Bungey	1	L. A. Murray	0
R. M. Harvey	1	C. A. Diebel	0
	3		5
TOTAL 9		TOTAL 7	

#### Country workshop competition

Drawings of the second and third premiated designs in a competition for the design of a country workshop, illustrated on page 168 of the A. & B.N., August 10, were incorrectly credited. Plan and elevations at the top of this page should have been credited to Kenneth Langlois, those under to Clive W. Chambers.

#### Trip to Rotterdam

The Faculty of Architects and Surveyors has arranged a visit to Rotterdam from September 19-23. It is open to members and professional colleagues, and their wives. The journey will be made by sea and accommodation has been booked at the Central Hotel, Rotterdam.

Four nights will be spent in Holland, allowing three whole days for visiting places of interest. Further details from The Secretary, The Faculty of Architects and Surveyors, 68 Gloucester Place, London, W.1.

## law and administration

#### Safe system of work

It is one of the duties of an employer to his workman to see that a safe system of work is followed. If a safe system of work is not adopted and in consequence the workman is injured, he may sue the employer for negligence and if successful recover damages.

In a recent case, *Dixon v Cementation Company Ltd.*, a workman was injured and he alleged negligence. At the material time the man concerned was assisting in the erection of wooden shuttering in an arch formation for a new cement roof. He was holding a piece of wood against the framework of the shuttering and another employee, Beevers, was trying to hammer in nails to secure the board to the arch framework. In so doing Beevers struck a glancing blow and a nail flew out and struck the plaintiff in the left eye, which he subsequently lost.

It was alleged that the accident arose as a result of an unsafe system of work; that the employers allowed an unsafe practice to be adopted, one which they knew or ought to have known to be unsafe, and one which they could have altered.

The lack of safety which was urged was the position in which the two men worked, so that the plaintiff's head and face had to be about a foot or so from the nail which was being hammered into position. If the man did look up in the way he did there was a real danger that the nail would fly off and do some facial injury to the plaintiff.

The trial judge concluded that the system of work was a negligent one. The question which concerned the Court of Appeal was a simple one. The employers argued that where the workman made this kind of allegation it was for him to undertake the burden of showing that there was an alternative system of work which could have been adopted and which would have been safe. In other words he must show that there was some practicable alternative.

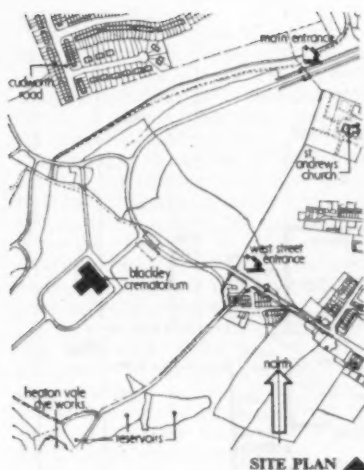
In support of their contention the employers cited some earlier words of Lord Simon in *Colfar v Coggins & Griffiths (Liverpool) Ltd.* to the effect that it is essential for the plaintiff to set out what the proper system of work should be and in what respect it has not been observed. But Lord Justice Devlin remarked:

"I do not think it means that, in every case where an unsafe system of working is alleged, it is necessary for the plaintiff to undertake the burden of pleading, and proving, an alternative system of work which could have been adopted and which would have been safe. That is for the employer to provide. There may be cases in which the plaintiff will not get very far with an allegation of unsafe system of work unless he can show some practicable alternative, but there are also cases—and I think this is one of them—in which a plaintiff can fairly say 'If this is dangerous, then there must be some other way of doing it that can be found by a prudent employer and it is not for me to devise that way or to say what it is'."

This opinion was shared by the other members of the Court of Appeal and the Judge's opinion was accordingly upheld.

# Blackley Crematorium

Leonard C. Howitt, Manchester City Architect  
 S. G. B. Roberts, Deputy City Architect  
 J. S. Marsh, Chief Assistant Architect  
 G. Carter, F. Williams, J. S. Middleton, N. Stanley, assistants  
 Frank Hymes & Partner, quantity surveyors  
 Truscon Ltd., structural consultants



Part elevation of crematorium showing exit hall. The coffin is removed by committal trolley after the funeral party has left the chapel through this hall to the wreath areas

THE Blackley Crematorium and Earth Burial Chapels building is symmetrical in layout, with two small chapels flanking a large central one with committal room, furnace rooms and offices at the rear. There are two main entrances upon the axis of the small side chapels with adjacent waiting space and lavatory accommodation. These entrances also serve to give access to the main chapel and along each side chapel an exit hall is provided. By co-ordinating the arrival of funeral parties it is possible to give continuous use of all three chapels. The use of the three chapels is dual, for burial or cremation service. For the former service the catafalque is screened from view by closing the ornamental gates which are normally used at the conclusion of the cremation service.

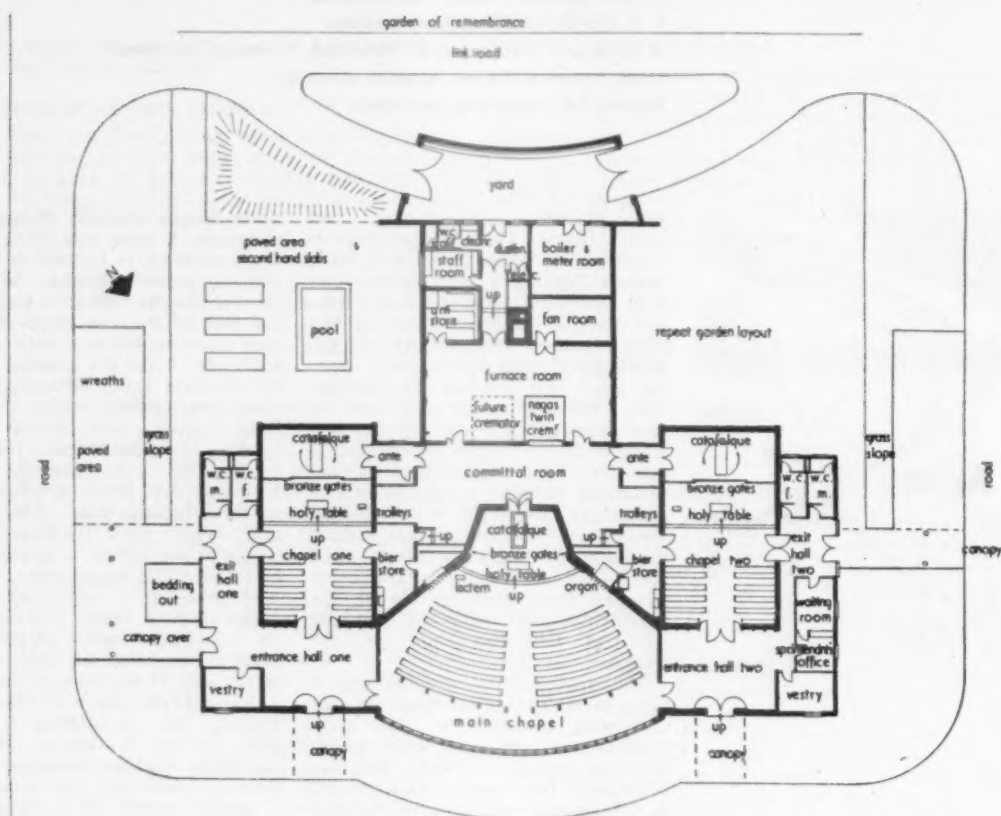
The approach to this building is along carefully laid out roads through undulating grounds to the main crematorium approach, from where the main façade is viewed. This has at its centre focal point a cross formed in blue mosaic and terrazzo measuring 17ft high by 6ft across, behind which there is a coloured and stained glass window between cast Portland stone mullions 22ft 6in high which rise from a cill over a faceted black granite plinth. On each side of this main chapel window are the entrances with cantilevered concrete canopies which provide cover from cars to the chapels. These project over teak

doors having specially designed door furniture in teak and silver bronze. Each entrance is formed in walls of simple golden brown brickwork. Similar concrete canopies project over the side of the exit doors in glazed wall areas to the exit halls. Behind each side chapel the building encloses paved areas using hexagonal paving slabs surrounding pools, fountains, floral layouts, and wreath display spaces. The main chapel is fan-shaped in plan, having splayed side walls of Uxbridge flint bricks which converge on the catafalque area. The coloured and stained glass windows between the mullions follow a gradual curve and enclose the chapel area. The roof is formed with a reinforced concrete frame, having beams radiating from the catafalque area supported by columns forming an aisle and the glazed wall at the back of the chapel. The catafalque gate is of black metal framing with an infilling of stained glass varying in density, while the catafalque itself is constructed in black Belgian marble and cast stone set on a purple carpet on a raised level reached by curved marble steps. Seating for 150 persons is provided, being made in beech, upholstered in Dunlopillo and a dark olive green coloured fabric.

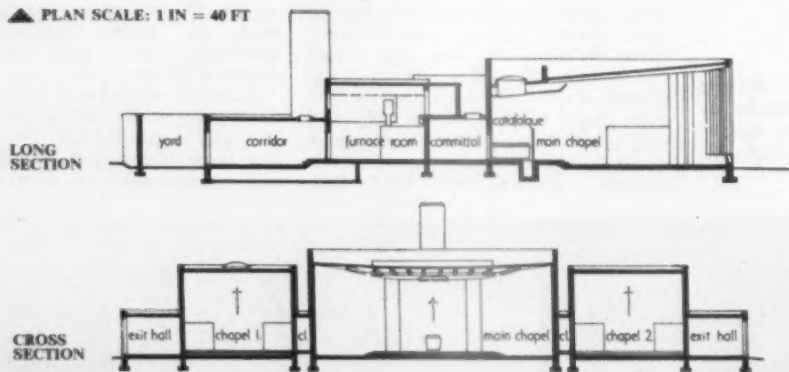
Each side chapel is of conventional rectangular shape with a lofty ceiling and can accommodate 50 persons. The large double entrance doors of teak and sycamore are formed in the



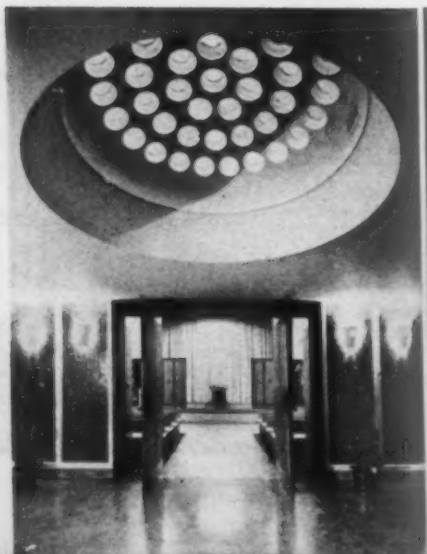




▲ PLAN SCALE: 1 IN = 40 FT



Below, two interior views of chapel 1. The catafalque is made of teak and sycamore. Music is recorded and amplified through speakers housed at the back of the gates





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back wall, flanked by panels of blue satin, below a coloured and stained glass window. The catafalque area has a back wall draped with grey velvet, the floor covered with a purple carpet, gates made with a black iron frame and grey leather panels patterned with "roundals", coloured nobules of glass.

The committal room at the rear of the main chapel, with access from each of the three side chapels, has been designed using acoustic tiles and cork floors in conjunction with plastered surfaces to minimise noise.

Cremation equipment is accommodated in the furnace room with access to a fully insulated room to house the fans which are used in conjunction with the Dowson & Mason twin cremator furnace. Provision has been made for a further twin cremator to be installed at a later date.

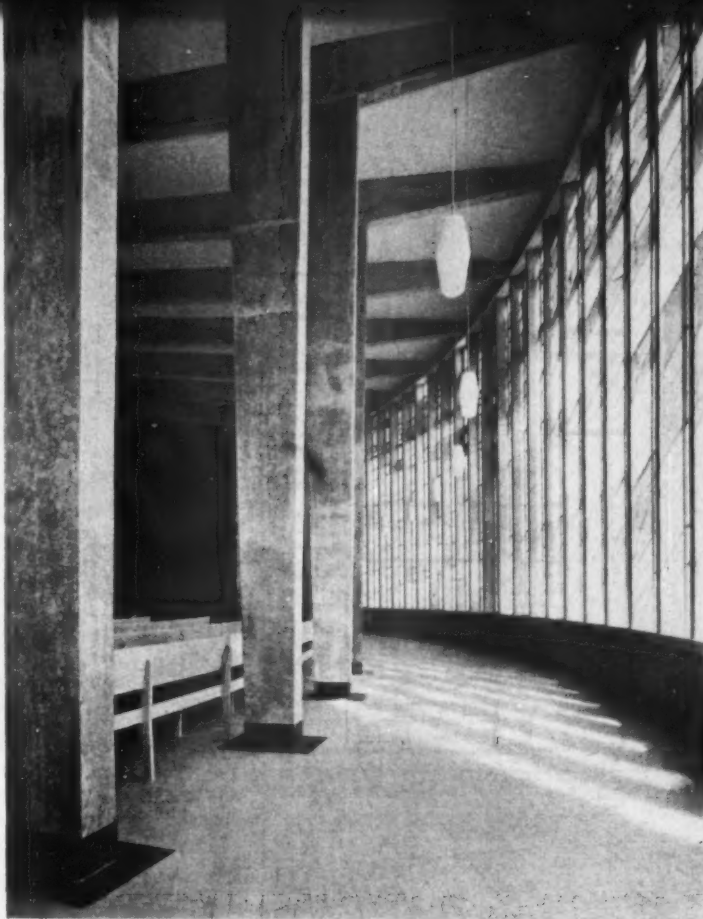
Construction is mainly in load bearing brickwork taken to reinforced concrete foundations. The main chapel only is a reinforced concrete frame structurally separated from the other part of the building and insulated against sound transmission.

Heating of the chapels and adjacent public areas is by low pressure panel floor heating with smaller rooms served by radiator wall panels.

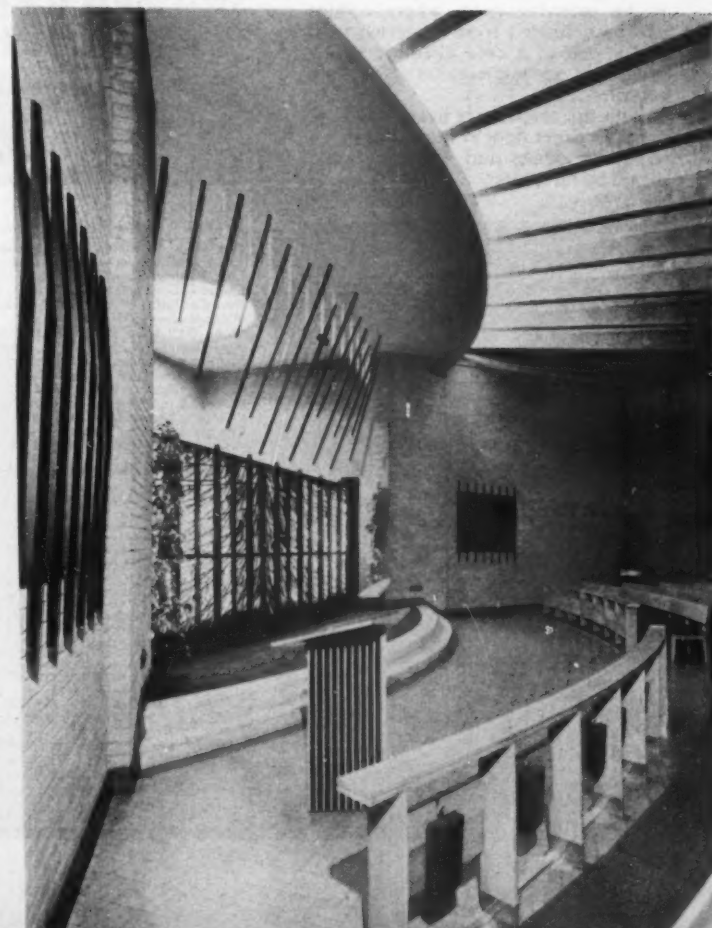
The registrar's block is situated at the opposite end of the main approach to the chapels and crematorium building and consists of a chapel of remembrance, mortuary chapel, public lavatories, registrar's offices and accommodation for the cemetery staff. The public rooms and registrar's rooms are planned to form a rectangle about a patio which has been planted and paved, and at the rear of the building about a service yard is the accommodation used by the cemetery staff.

The predominant feature of this building is the chapel of remembrance, formed externally with black bricks to follow the duodecagonal plan shape with vertical cast stone fins at each corner. This gives a contrast with the simple lines of the adjacent accommodation built using golden brown facing bricks. At the centre of the chapel of remembrance is the book of remembrance, contained in a teak frame on top of a circular table form in statuary marble, which contrasts with the green Issarie marble floor. Upon the main access of the room are teak doors which give access from the outside and to the main public corridor. On the opposite access, built into the walls, there are teak and glass cabinets to display the closed books of remembrance. At the centre of the reinforced concrete roof there is a large domelight with circular glass lense lights, below which there is a purpose made circular light fitting in spun copper. The internal walls are formed in white Uxbridge flint bricks.

The mortuary chapel is a simple rectangular room with a catafalque "built in" along one short wall. The catafalque being faced with teak and



Two views of main chapel interior. Above, the window and rear aisle and, below, the catafalque area. The organ is housed behind the splayed side walls



## crematorium



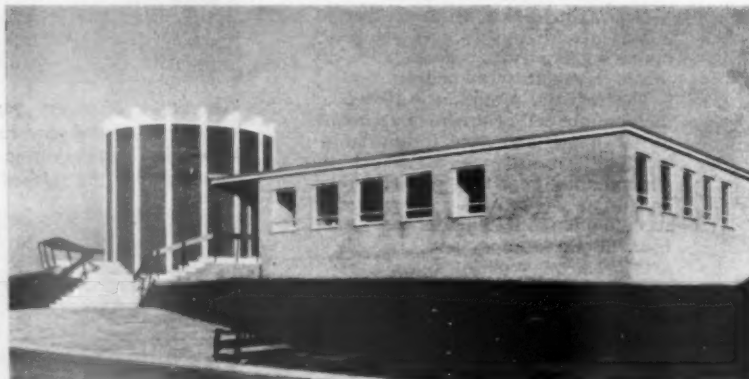
continued from page 203

the back wall with a marble texture acoustic tile. Other walls are in plaster and the floor area is covered with a purple carpet, whilst the more used parts of the room are of Granwood flooring. The adjacent room to this is the receiving room where coffins can be unloaded from a service yard and stored in a cold chamber which provides accommodation for six coffins.

Both the chapels are heated by low-pressure panel floor heating whilst the remaining offices and workrooms are served by radiators.



Two views of the registrar's block showing the office and chapel of remembrance. Below left, interior of chapel of remembrance, registrar's block



General Contractors: G. & J. Seddon Ltd.

Sub-contractors and suppliers:

Cast Stone: Western Bros. (Manchester) Ltd. Catafalques in Side Chapel: G. & J. Seddon Ltd., Ellis Rees & Co. (Manchester) Ltd. Catafalques in Main Chapel: G. & J. Seddon Ltd., Ellis Rees & Co. (Manchester) Ltd., Western Bros. Catafalques Gates to Side Chapel: Birmingham Guild Ltd. Catafalques Gates to Main Chapel: Birmingham Guild Ltd., Williams & Watson Ltd. Cross on Main Elevation: Granolithic Concrete Co. Ltd. Cycle Racks: Alfred A. Odoni & Co. Ltd. Dome Lights: Williams & Watson Ltd. Drapes in Catafalque Areas: Lewis's Ltd. Drying Room Equipment: Matthew Swain Ltd. Electrical Installation: Frank Wall & Co. Ltd., S. H. Heywood & Co. Ltd. Electrone Organ: John Compton Organ Co. Ltd. Glass-crete Domes and Lights: J. A. King & Co. Ltd. Heating Installation: Engineering Services Ltd. Heating, Hot Water, Gas and Ventilation Installations: G. N. Haden & Sons Ltd. Ironmongery: Laidlaw & Thomson Ltd. Ironmongery, Aluminium Doors and Locks: James Gibbons Ltd. Lightning Conductor: W. J. Furse & Co. (Manchester) Ltd. Metal Windows: W. E. Coffey & Son Ltd. Opening Ceremony Plaque: J. & H. Patteson Ltd. Pulveriser: Ellis Rees & Co. (Manchester) Ltd. Refrigeration Equipment: J. & E. Hall Ltd. Seating in Main Chapel and Side Chapels: Hille of London Ltd. Sliding Door Gear: P. C. Henderson Ltd. Sprayed Asbestos: Turners Asbestos Cement Co. Ltd. Strong Room Door: Chubb & Son Lock & Safe Co. Strong Room Metal Shelving: W. H. Proce & Co. Ltd. Twin Cremator: Dowson & Mason Gas Plant Co. Ltd.

## COST ANALYSIS OF CONTRACT PRICES

Tender date .. .. .	November 1955
Work started .. .. .	October 1956
Work completed .. .. .	September 1959
Tender price accepted .. .. .	£101,686
Highest tender price .. .. .	£115,123
Lowest tender price .. .. .	£101,686
Total floor area .. .. .	12,997 ft sup
Cube of building .. .. .	289,143 ft cu

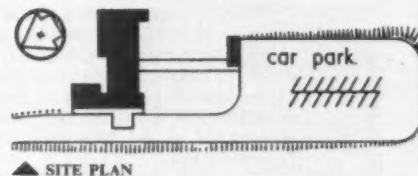
Foundations and superstructure .. .. .	£89,511
Drains, paths and all external works .. .. .	£12,175

Total .. .. .	£101,686
Cost per ft super .. .. .	156s. 6d.
Cost per ft cube .. .. .	7s. 0½d.

# crematorium, Tunbridge Wells

The Architect and Building News, 17 August 1960 205

William Pickering, in succession to Hugh B. Bishop, borough surveyor  
Brian G. W. Blackwood, chief architectural assistant  
D. R. Nolans & Co., quantity surveyors



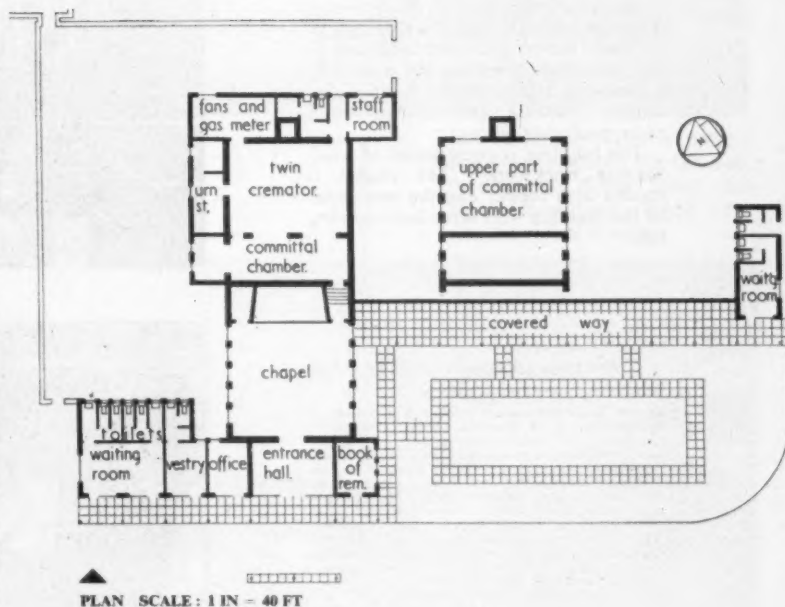
THE crematorium is designed to cater for the needs of Tunbridge Wells and other towns and villages within a radius of 15 miles.

The site is on land adjoining the existing Tunbridge Wells cemetery; the land being acquired some time before the war for this purpose. It is a pleasant site overlooking typical Sussex countryside of farms and woodland and is within one-and-a-half miles of the town centre. There is little development around it.

It is supposed that, when the crematorium is working to maximum capacity, services will take place every 30 minutes for six days of the week. There is one chapel, two cremators and other ancillary buildings. It may be necessary at a later date to provide an additional chapel and a further cremator. The scheme has been designed so that these additions may be economically carried out.

The building is planned so that the *cortège* arrives at the main entrance to the crematorium under the cover of the *porte-cochère* and the mourners go directly into the chapel. The vestry is so sited that the clergyman can see the arrival of the *cortège*.

The chapel has been designed to seat 72 people and it is assumed that when a large service is required it will be held at a church or chapel prior to going on to the crematorium.



The crematorium seen from the North





The focal point of the chapel is the altar table with the catafalque in a subsidiary position to one side. The coffin is taken through to the committal chamber where it is placed on a roller top transfer bier and then committed to the cremator which is fuelled by gas.

There is a covered way between the chapel and the committal chamber for lawyers or next of kin if they want to see the body put into the furnace.

An electronic organ is provided. Recorded music is also available.

Other rooms provided adjacent to the cremation room are the urn store, pulverising room, meter room—containing also the electric fans—staff room and other offices.

The building is constructed of load-bearing brickwork. The chapel is roofed with copper and the remainder of the building with three-layer roofing felt.



#### General Contractors:

Perryman (Building Contractors) Ltd.

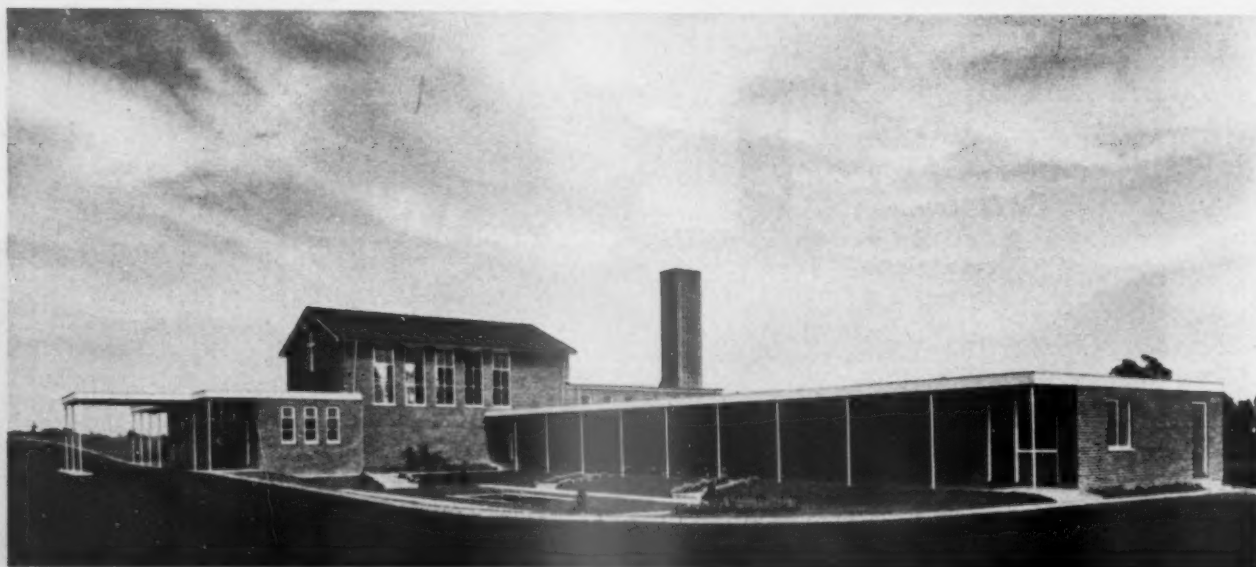
#### Sub-contractors and suppliers:

Airwick Spray Installation: Airwick Ltd. Books of Remembrance: F. G. Marshall. Bronze Nameplates: A. J. Binns Ltd. Carpet: Waymarks Ltd. Catalogue Gear, Smoke Density Equipment, Cremators, Pulverizer: Dowson & Mason Ltd. Chapel Roof: Broderick Insulated Structures. Concrete Roofing: Concrete Ltd. Doors and Screens: Jayanbee Joinery Ltd. Electric Supply Main: South Eastern Electricity Board. Electrical Installation: Strange Electrical Ltd. Electronic Organ: Miller Organ Co. Ltd. Felt Roofing: H. Kemp (Asphalte) Ltd. Gas Installation: South Eastern Gas Board. Gates: J. T. E. Levings & Sons. Ironmongery: Louis G. Ford Ltd.; James Gibbons Ltd. Lectern, Books of Remembrance Cabinet, Pews and Teak Cross: Walker Symondson Ltd. Light Fittings: Troughton & Young (Lighting) Ltd.; Merchant Adventurers; G.E.C. Ltd. Lightning Conductor: W. J. Furze & Co. Ltd. Other Furniture: Hughes Furnishing. Recorded Music Installation: Pamphonic Reproducers Ltd. Roman Stone Cross and Gate Pier Panels and Copings: A. Burslem & Son Ltd. Sanitary Fittings: John Bolding & Sons Ltd. Teak Seats: Mackenzie & Moncur Ltd. Thermoplastic and Cork Tiling: Horsley Smith & Son (Hayes) Ltd. Wall Tiling and Committal Chamber: Carter & Co. (London) Ltd. Water Heaters: Ascots Gas Water Heaters Ltd. Windows: Henry Hope & Sons Ltd.



Above, the chapel. The committal chamber and cremator is directly behind the altar

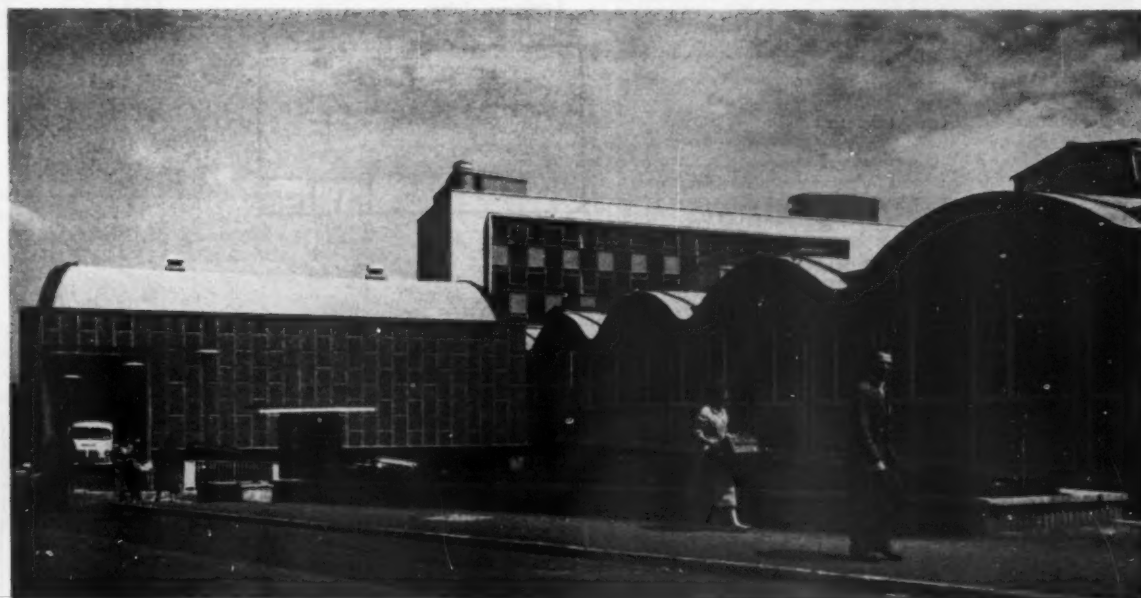
Left, detail of pews in the chapel. Below, view of the crematorium from the south west







Two views of Wolverhampton's new retail and open market. Top, frontages to Salop Street and School Street and, below, rear view from Peel Street



It is recorded that as long ago as the year 1204 a market was held in the township of "Wulfrun Heantun", the Saxon name by which Wolverhampton was then known. Through the centuries this market has been the town's focal point. In 1853 a market hall was opened to become one of the foremost trading centres in the country. Many and varied were the businesses established there, often handed down from father to son, and all contributing to the general success of the undertaking. The new retail market illustrated on the following pages replaces this Victorian predecessor to provide for the ever-increasing trade in and around Wolverhampton

## Wolverhampton retail market

H. Schofield, borough engineer  
 A. G. E. Chapman, deputy borough architect  
 N. V. Dowell, chief assistant architect  
 J. A. Richards, assistant architect in charge  
 K. W. Johnson, assistant architect  
 Hoare, Lea and Partners, consultant electrical,  
 ventilating and heating engineers  
 Henry Vale & Sons, quantity surveyors  
 G. K. N. Reinforcements Ltd., reinforced concrete design

THE new retail market is sited on what was previously known as Brick-kiln Croft and is a replacement of market premises which were over 100 years old. These premises were of such structural state that the cost of improvements to the standard of hygiene now required proved to be an uneconomic proposition.

The site is an island one bounded by Salop Street and School Street as the main shopping frontages with Peel Street and Great Brickkiln Street bounding the west and south sides. Peel Street forms a service road to the markets, all goods and vehicular accesses having been planned from this boundary.

The area in the immediate vicinity of the new buildings is being developed privately with shops and business premises, and will be served by the proposed new inner ring road which will pass alongside and to the west of Peel Street.

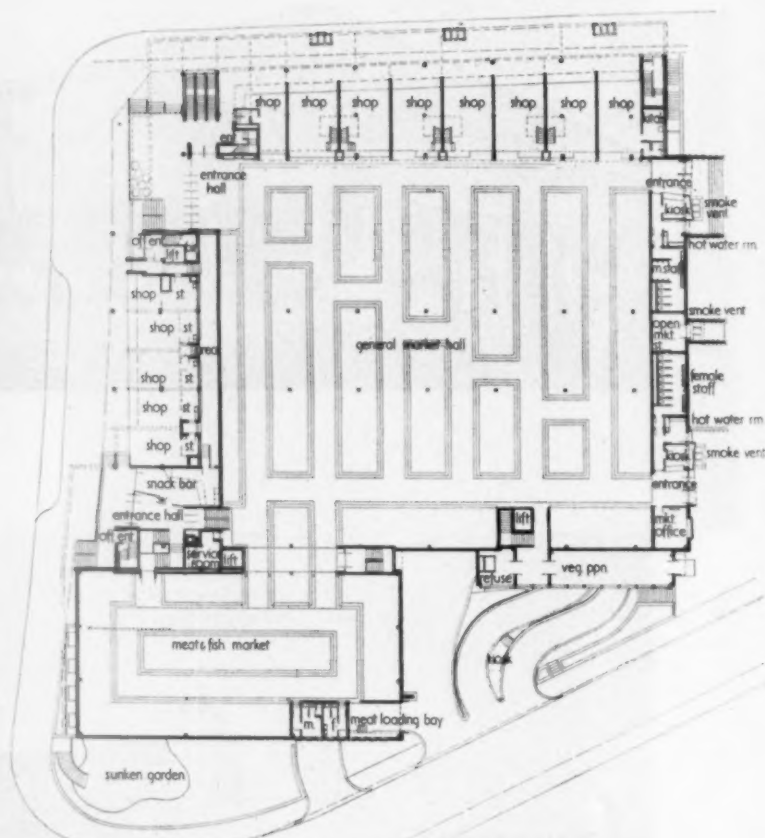
#### Planning

The project consists of the following:—An open-air market accommodating 114 removable stalls which may be moved to form a large open space for public meetings. A covered retail market comprising a separate meat and fish hall, and a large hall for general foods and other goods. A spacious licensed restaurant seating 180 persons, with balcony coffee-tea bar and sunken garden terrace. A snack bar is also planned adjacent to one of the main market entrances. Five "lock-up" shops fronting Salop Street and eight "through" shops having frontages to both School Street and the general market hall, with showrooms and stores at first floor level. Lettable offices at second floor level in the School Street block and at first to fourth floors in the Salop Street block. Underground car park for 98 cars with approach and exit ramps from Peel Street. There is easy covered access to the car park from the market halls and office blocks. Underground public toilets. Underground storage vaults and service roadway serving market halls by goods lifts.

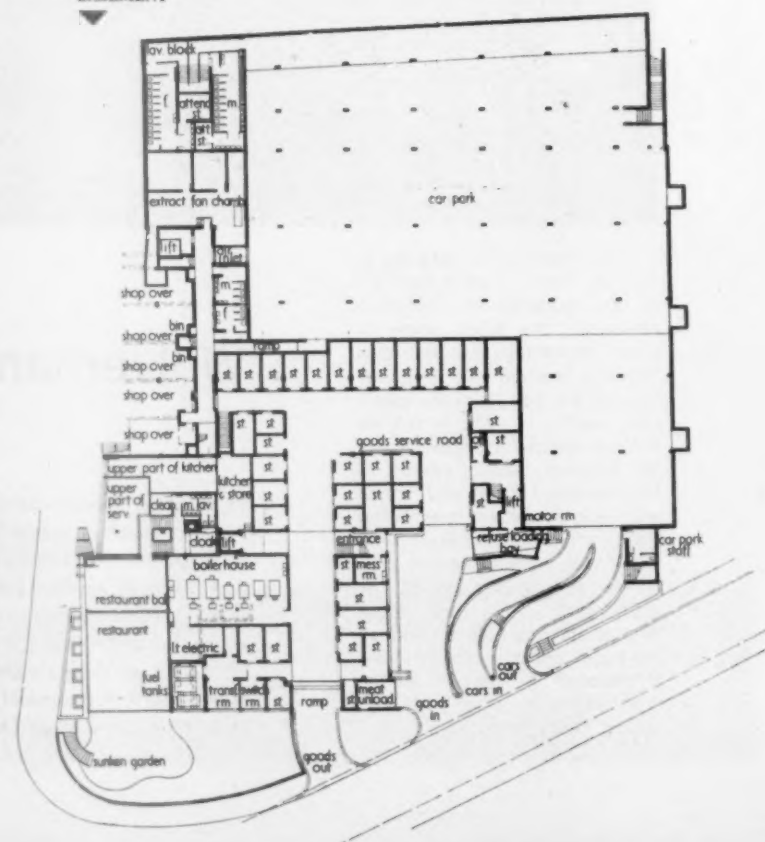
Particular attention has been given to the pre-cleansing of vegetables and fruit, and a separate room equipped with stainless steel work tops and water sprays has been planned adjacent to the general market hall and open market for this purpose.

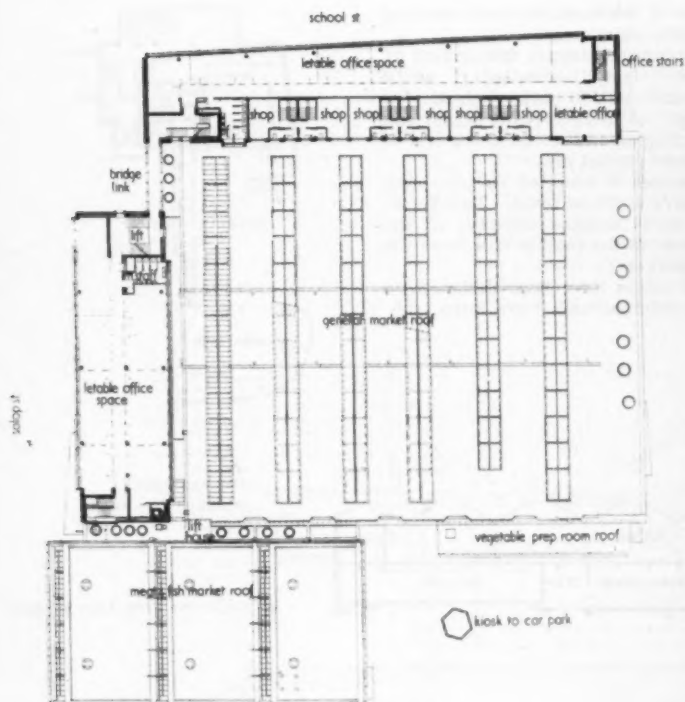
In conjunction with this vegetable preparation room and the markets generally, a mechanical refuse container and loader has been designed to handle and load refuse into waiting refuse vehicles.

The general market hall is supplied with goods from the basement stores by two goods service lifts and the stores are served by a "U" shaped service road ramped from Peel Street. The meat and fish hall is supplied direct from a meat unloading bay or, alternatively, from the basement store by lift.



GROUND FLOOR PLAN  
BASEMENT





FIRST FLOOR PLAN SCALE: 1 IN = 64 FT

Right, shopping arcade, School Street. On the second floor there are lettable offices. Main elevations to the office blocks are of aluminium curtain wall construction with infilling panels between floors of coloured "Muroglass". Below, view of the main entrance from Salop Street





continued from page 208

To one side of the general market hall there are eight "through" shops with frontages to School Street and to the market. These shops have stores and showrooms at first floor level. Fronting Salop Street there are five "lock-up" shops which can be served with goods from the underground service road. The interior fitting of all shops has been carried out by the tenants to their own requirements.

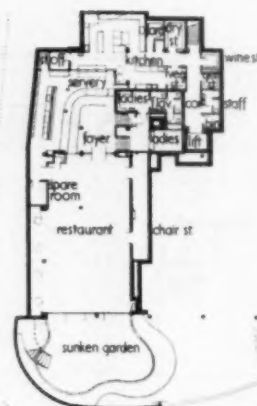
The design of the open market enables easy lorry and public access over concrete roadways to lines or

groups of demountable stalls standing on tarmacadam areas.

The open market is illuminated by column lamp standards, whilst individual stalls are lighted by "strings" of electric lights which can be uncoupled and stored at the end of each open market day.

This area is enclosed by low brick boundary wall and fence. Two kiosks have been designed adjacent to the entrances to the market hall from the open market.

The offices have been designed on a 4ft module and have been sub-



▲ SUB-BASEMENT  
SCALE: 1 IN = 64 FT



Goods entrance and entrance to car park from Peel Street





divided by metal partitioning to suit individual tenants' requirements. Services have been designed to ensure that wherever partitions are placed adequate heating, lighting and power is available in the space thus formed within the modular system. The offices are served by a fast passenger lift as well as four staircases.

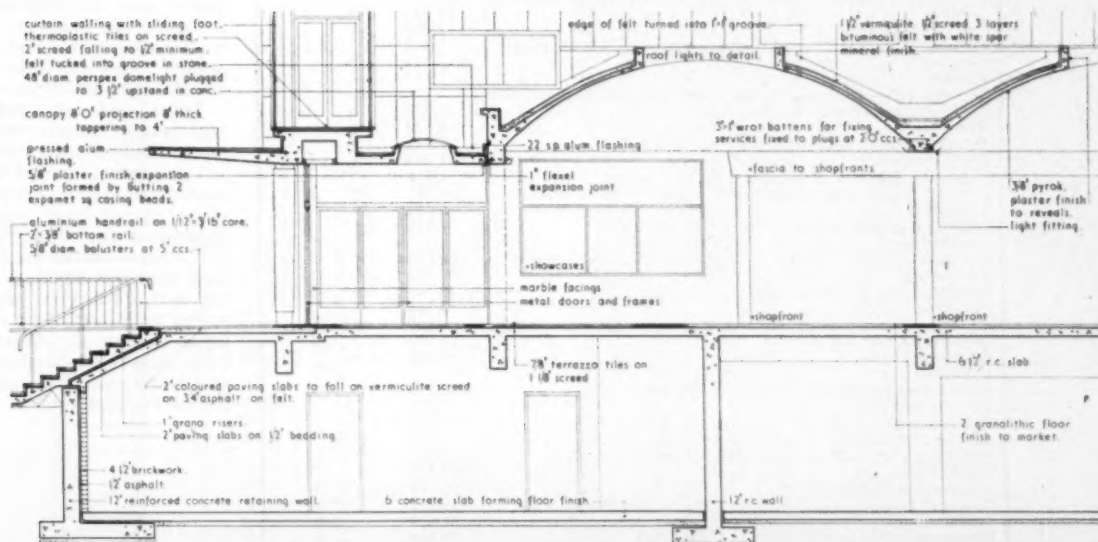
The civic restaurant is designed to operate either as a self-service or waiter-service restaurant with facilities for evening social functions. A coffee balcony has also been planned at street level and a snack bar, supplied

from the main kitchens, is sited adjacent to the secondary market entrance.

The restaurant, which is partially below ground level, opens on to a paved terrace of a sunken garden, where during the summer months a light refreshment service will be provided.

#### Construction

The structural frame, floors and roofs throughout are of reinforced concrete, with brick infilling walls; the



▲ DETAIL CROSS SECTION SCALE: 1 IN = 10 FT



## COST ANALYSIS OF CONTRACT PRICES

Tender date .. .. .	April 1956
Work started .. .. .	May 1957 (delayed by Ministry)
Work completed .. .. .	May 1960
Tender price accepted (subject to fluctuation clause) .. .. .	£462,000
Highest tender price .. .. .	£529,843
Lowest tender price .. .. .	£462,000
Superficial area of buildings .. .. .	137,000 ft. super

	Total £	%	Per F.S. s. d.
<b>Foundations</b>			
Including sub-basement and basement carcassing and inclusive of excavations and asphalt tanking .. .. .	65,084	14.0	9 6
<b>Superstructure</b>			
Roofs, floors and walls .. .. .	41,069	8.8	5 11
Windows including curtain walling, entrance doors and roof lights .. .. .	25,396	5.4	3 9
Facing materials .. .. .	12,260	2.6	
Portland stone, marble and exposed aggregate concrete panels .. .. .	7,873	1.7	1 1
Balustrading .. .. .	1,510	.3	2 1
<b>Finishes</b>			
Ceilings (suspended perforated hardboard and acoustic tiles, plastered and pyrok finishes) .. .. .	7,771	1.6	1 1
Roofs .. .. .	4,325	.9	7 1
Doors including sliding folding doors and gates .. .. .	4,738	1.0	8
Walls plastered .. .. .	7,445	1.6	1 0
Emalux (glazed wall finish to stalls and stoves) .. .. .	3,488	.7	6
Floors (Granolithic, terrazzo, thermoplastic, wood block) .. .. .	14,283	3.0	2 0
Sanitary fittings .. .. .	2,042	.4	3 1
Cupboards, shopfronts and other fittings .. .. .	9,956	2.1	1 5
<b>Installations</b>			
Heating: L.P.H.W. system to offices and restaurant only .. .. .	12,274	2.6	1 9
Ventilation .. .. .	9,442	2.0	1 4
Lighting: Fluorescent, tungsten and power .. .. .	30,741	6.6	4 4 1
Plumbing .. .. .	4,118	.8	7
Gas .. .. .	180	.03	
Lifts, refuse disposal unit .. .. .	11,730	2.5	1 9
Drainage .. .. .	5,261	1.1	9
<b>Siteworks</b>			
Paths, planting, roads, boundary walls, fences .. .. .	12,792	2.7	1 9 1
Fencing and gates .. .. .	1,075	.23	1 1
General market stalls (average cost per stall) .. .. .	228		
Meat and fish stalls (average cost per stall) .. .. .	353		
General market hall and meat and fish hall .. .. .	133,568		
Open market .. .. .	23,509		
Underground car park .. .. .	55,698		
Tenants' stores .. .. .	26,437		
Public toilets .. .. .	14,529		
Restaurant and kitchen (including snack bar) .. .. .	39,938		
Shops .. .. .	36,551		
Offices .. .. .	131,770		

Total cost of job .. .. . Final account not yet prepared  
Total cost per ft. super (based on tender) .. .. . 67s. 5 1/2d.

continued from page 211

general market halls being clad externally with exposed aggregate concrete panels and the office blocks having end walls faced with Portland stone. The main elevations to the office blocks are of aluminium curtain wall construction with infilling panels between floors of coloured "Muro-glass".

There are 86 stalls in the general market hall and 25 stalls in the meat and fish hall. All stalls are equipped with basic counters, stall headboards, sinks and wash hand basins as necessitated by the particular trade. The actual counters have been designed to permit easy dismantling and erection for cleansing purposes. All walls to food stalls are finished with a glazed cement finish and floors generally are of coloured granolithic or terrazzo.

Toilets and hot water rooms have been planned to serve both the general market and the open market.

The general market hall has been roofed with barrel concrete roof shells, which permit large clear spans with continuous roof lights at the crowns and absence of beams or other structural members ensuring no lodgement for dust. The meat and fish hall is roofed with north light concrete shells which exclude any direct sunlight and both halls have continuous opening ventilators operated electrically from the market clerk's office.



## General contractors:

William Moss &amp; Sons Ltd.

## Sub-contractors and suppliers:

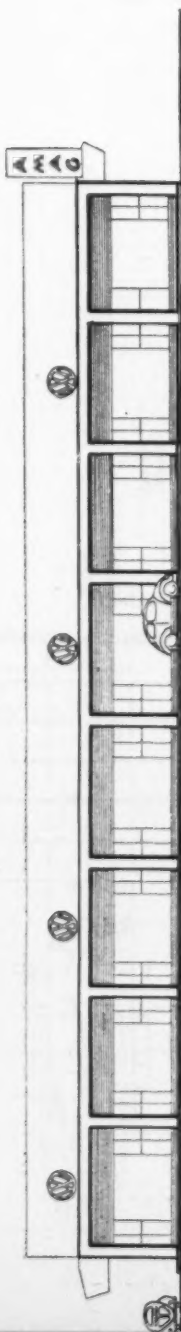
Balustrading and Fencing: Russells Forge & Engineering Co. Ltd. Concrete Cladding Panels: Tarmac Vinculum Ltd. Curtain Walling: Williams & Williams Ltd. Design of Structure and Suppliers of Reinforcement: G.K.N. Reinforcements Ltd. Electrical Contractors: J. A. Brown & Partners. General Market Stalls: A. Edmonds & Co. Ltd. Heating and Ventilation: D. Wiseman Bros. Ltd. Ironmongery and Windows: James Gibbons Ltd. Lifts: Bennie Lifts Ltd. Meat and Fish Stalls: William Moss & Sons Ltd. Paints: Hadfields (Merton) Ltd.; Permaglaze Ltd. Partitions: Norwood Steel Equipment Ltd. Pre-cast Concrete Work: Hillcrete Ltd. Portland Stone: Bath-Portland Stone Firms Ltd. Pyrok Ceilings: Pyrok Contracts (Midlands) Ltd. Refuse Disposal Unit: John Thompson Ltd. Roller Shutters: Chatwood-Milner Ltd. Roofing: Granflex Ltd. Sanitary Fittings: A. D. Foulkes Ltd. Sliding Folding Gates: The Bolton Gate Company Ltd. Shop Fronts: Thomas Frost (Shopfronts) Ltd. Structural Steelwork: Hudson Brown Ltd. Thermoplastic Floor Tiles: Marley Tile Company. Terrazzo and Granolithic: Zaccaroli Bros. Ltd.

The restaurant

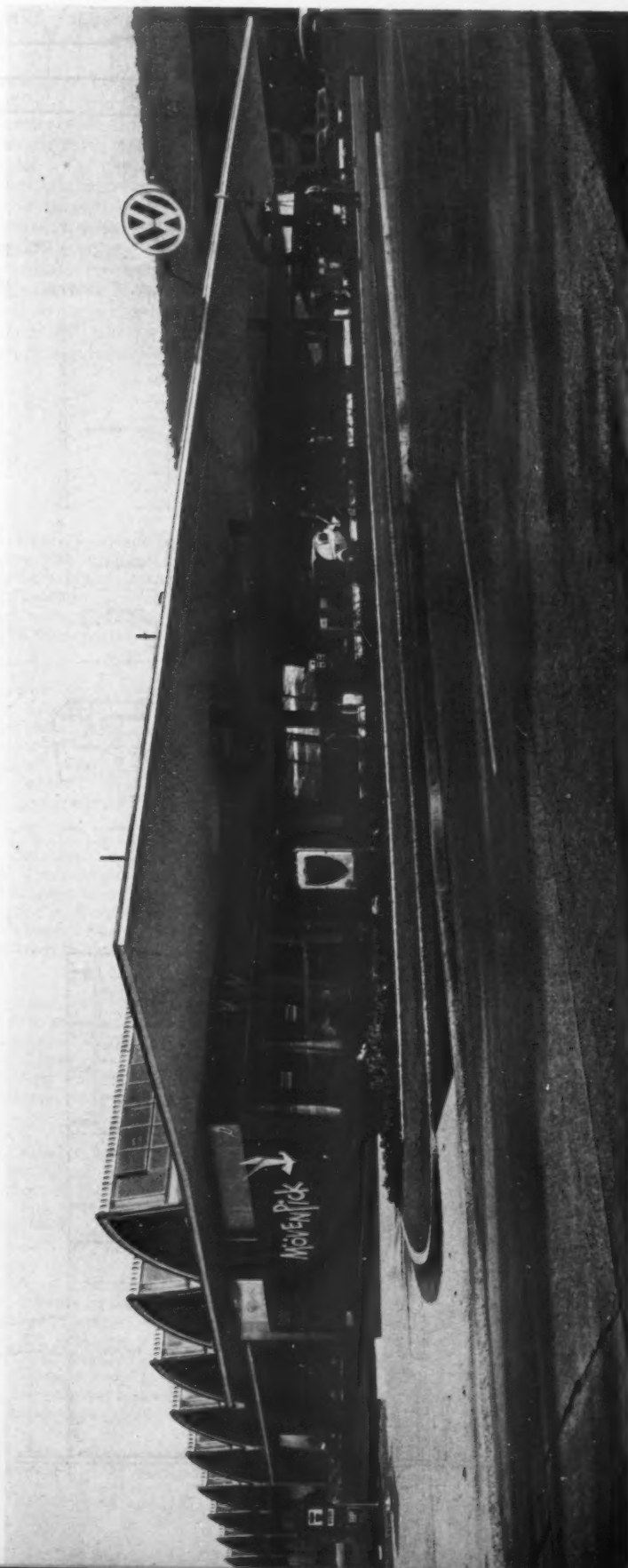
# garage at Zurich

213

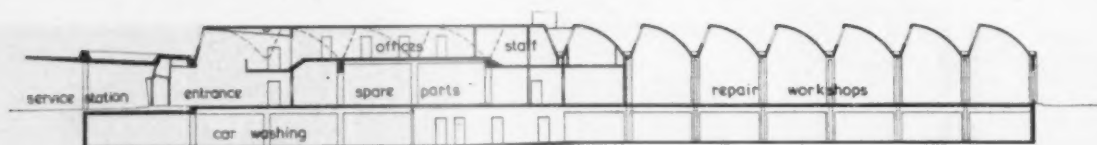
H. Hochuland, E. Cukierman, architects  
H. Lechner, engineer



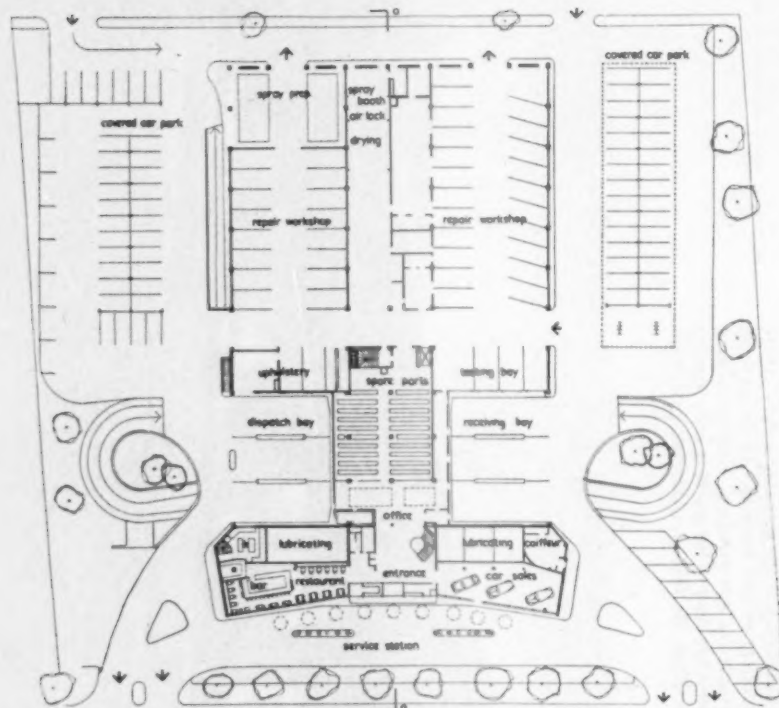
This garage is on the outskirts of Zurich on the road to Winterthur. It has been laid out to deal with the servicing and repair of Volkswagen and Porsche cars. Up to 300 cars a day can be handled. The cars enter the receiving bay on the ground floor and after testing go as necessary to the main repair workshop or the spraying booths. There is a separate but interconnected circulation to the basement for servicing, lubrication and washing. All the working areas are top lit and the whole interior is air conditioned with special extracts for car exhausts. The circulation throughout is one way. Construction is of reinforced concrete and twin columns are used in the working area housing ventilating ducts and services. There are clear spans of 43 and 58 feet to allow for free unobstructed movement





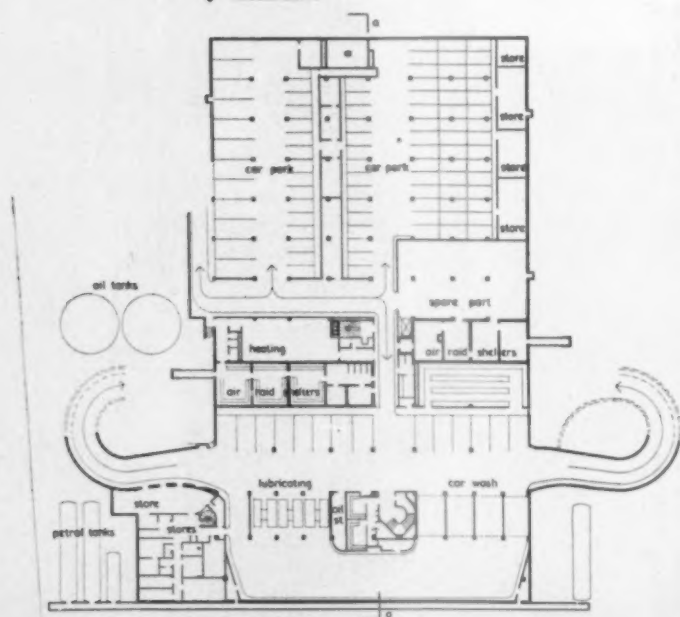


LONG SECTION AA



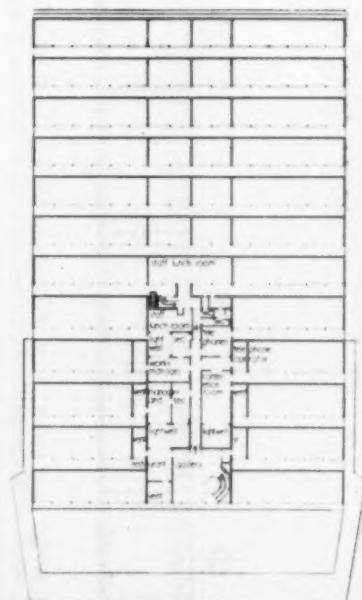
▲ GROUND FLOOR

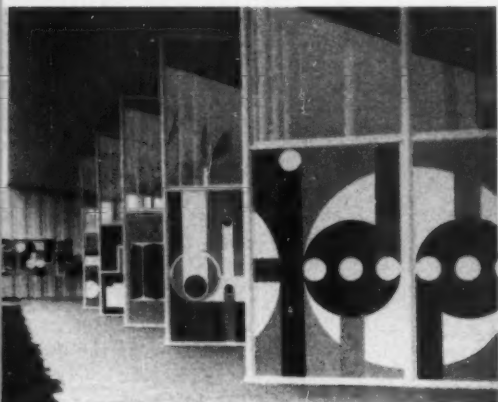
▼ BASEMENT



Plans show the easy and ingenious circulation which ensures a minimum of traffic confusion. The Moven Pick Restaurant designed as an integral part of the garage provides welcome space for relaxation while cars are being serviced

▼ FIRST FLOOR



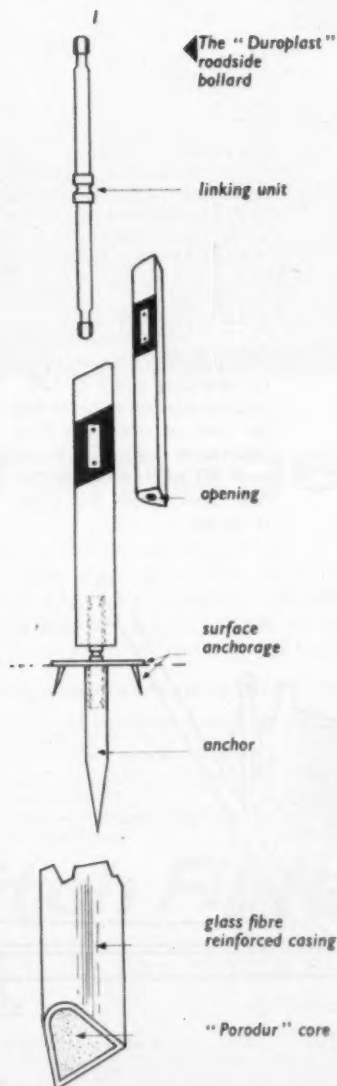


One of the pavilions

## A note on some exhibits

ROLF ROSNER

The Hanover Fair is not only remarkable for its exhibits but also for the efficient handling of motorised traffic by the city and fair administration. The turmoil of the central area can be avoided by the use of a three-lane by-pass leading through woods and parks to the fair grounds which have parking facilities for ten thousand vehicles. The city authorities have further facilitated a smooth flow of traffic by the installation of a dozen strategically-placed television cameras operated from a central control point. The architectural integration of the exhibition pavilions increases from year to year; the imaginative display of even the heaviest industrial products, the daring design of some of the pavilions and the almost expressionist interpretation of industrial shapes and forms on numerous display panels are likely to delight any designer or architect. This year there were more British exhibitors in Hanover than ever, but the display of building materials, products and techniques has remained almost non-existent, although much interest could be aroused amongst Germans and other nationals.



1. Plastic road-side bollard. This has a glass-fibre reinforced outer casing, a resilient porous core and stabilizing metal anchorage. Weight: 4-5lb.

Schaumverbundbau GMBH, Nurnberg, Prinzregentufur 13.

★

2. The "Styrafenster" seamless glass-fibre reinforced polyester window. Units of any kind can be produced in sizes of up to 6ft 4in x 10ft. A wide range of colours is available.

Polymatic GMBH, Nurnberg, Prinzregentufur 13.

★

3. Stationery storage unit in writing desk. The firm produces other elegant and efficient unit furniture for offices, designed by Robert Gutmann.

Planmobel Busch & Co., Espelkamp-Mittwald/Westfalen.

★

4. Machinery for road construction. The firm specializes in the manufacture of tarmac road finishers, and the latest type of finisher is 33ft wide.

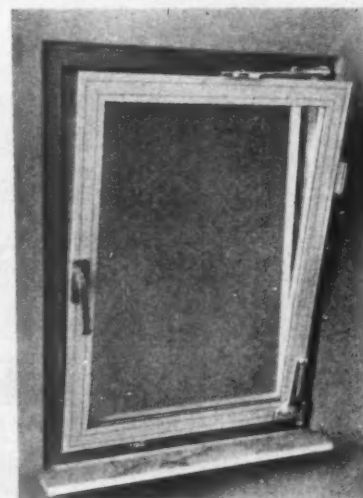
Eduard Linnhof Maschinenfabrik, Northeim, Hanover.

★

5. Mini-kitchen SKJ 110. Width: 3ft 8in. Depth: 2ft. A safety device switches off the current for hot-plates and oven when the upper left door is closed. Two types of mini-kitchens are produced by this firm. These are designed for one-room flats, weekend houses or offices and are equipped with drawers, revolving doors, storage space, refrigerator, sink and drainage rack, hot and cold water supply, hot-plates and oven, brackets and shelves for kitchen utensils and internal lighting. The external and internal surfaces are lined with plastic sheets. Price: £244.

W. Ernest Haas & Sohn, Neuhoftshutte b. Sinn Hessen-Nassau.

2



3





6. Portable earth drilling machines for vertical and horizontal borings. The horizontal drill type KS 244 drills 33ft in 35 min beneath a busy road without interfering with traffic passing above.

*Andreas Stihl, Maschinenfabrik, Waiblingen-Neustadt, Württemberg.*

★

Other items of interest include a compact little reinforcing bar cutter, capable of making 42 cuts per min. This may be used with a bar bending machine, also a product of this firm.

*Hermann Steinweg K.G., Baumaschinenfabrik, Werne an der Lippe, Baaken 22.*

★

A large range of tractors, trolleys and carts for brick works are manufactured by *Lippische Ziegelkarrenfabrik Friedrich Ruthe, Schotmar/Lippe.*

★

Any conceivable type of hand-operated trolleys, carts, trucks and lifting devices are manufactured by *Gebr. vom Braucke K.G., Bielefeld-Schildesche.*

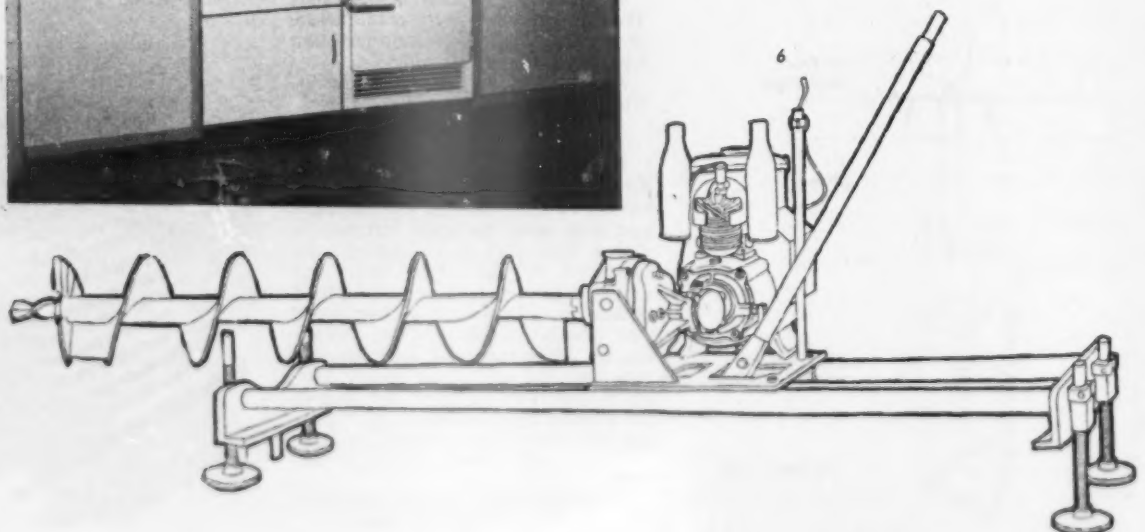
★

A fascinating display of three-dimensional ceramic tiles contains beautiful but very expensive products and one wonders whether similar British products could not be profitably shown next year.

*Ceramica joo, Milan.*



Top, a finisher for road construction with an operating width of 33ft. The mini-kitchen illustrated to the left is designed for use in one-room flats, week-end houses or offices. A safety device switches off the current for hot-plates and oven when the upper left door is closed







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have been used as part of the design of wall and foundations at site. detail C. The wall is satisfactory.

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# prefabrication in multi-storey flats

On the following pages we describe the application of prefabrication techniques to multi-storey flats at present in course of construction at Galway Street in London. Architects: Emberton, Franck and Tardrew. Consulting engineers: Felix J. Samuely and Partners. General contractors: Wates Ltd. Suppliers of prefabricated units: The Modular Concrete Co. Ltd.

THIS housing scheme consists of two 17-storey blocks (1) with six flats per floor, and an additional block of six storeys on a more remote part of the site.

The structure consists of long span R.C. slabs, supported by the longitudinal external walls, and R.C. walls surrounding the lift and staircase shafts. Beams between these shafts and at the ends of the building support the slab between the gaps in the walls. The continuity provided by the adjacent slab, or by the walls, made it possible to span 22ft with a 6½in R.C. slab (see typical floor plan A).

This system of construction, apart from proving economical in cost, offers a further advantage of complete avoidance of cross beams over the whole length of the building.

The scheme went out to tender on the basis of an *in situ* construction (3). After Messrs. Wates had received the contract in normal competition, the structure was converted into a largely prefabricated system.

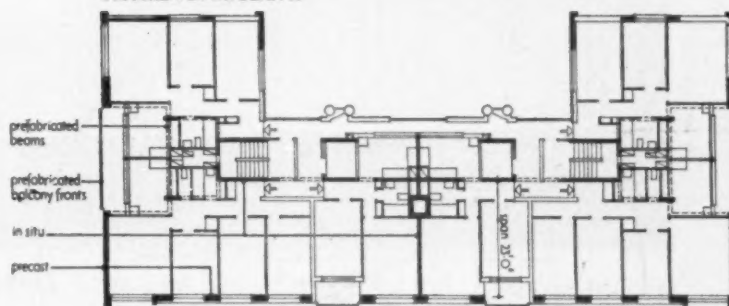
The objects of this conversion were twofold:—(A) To simplify, and speed up the construction of the building (see plan B); (B) to improve the standard of finishes provided. It was decided to pre-cast the following elements of the structure:—(a) External columns and walls; (b) edge beams, and balcony faces; (c) internal beams to soffit of slabs; (d) stair flights; (e) cantilever balconies; (f) chimney flues; (g) refuse chutes (4).

The contractor did not consider savings could be made by pre-casting the slab, bearing in mind the measures needed to obtain continuity with the lift shaft and staircase walls, and over beams, etc. This might not, of course, have been the case if the structure had been designed for pre-casting from the early stages. The lift and staircase walls together with the four internal columns were carried out *in situ* owing to the difficulty of splicing the heavy reinforcement required on the lower floors to resist direct and wind loads.

The external columns units, which have been used as part of the external wall are constructed as shown in detail C. The load is transferred from



TYPICAL FLOOR PLAN A



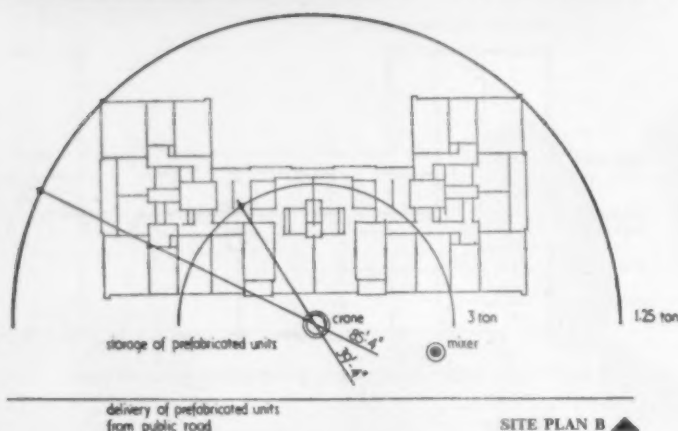
Prefabricated units await incorporation into the flats







3



The top photo shows floor slabs cast *in situ* as originally envisaged when the flats went out to tender. Below, one of the tower blocks at an early stage of construction. Many of the pre-cast elements described on page 217 can be seen awaiting incorporation into the block



4

unit to unit by direct compression, through the 1in thick dry-packed *in situ* joint, and via the threaded mild steel rods, which are provided with nuts, and lock nuts to enable the level and plumb of the column to be accurately adjusted.

The units were cast face down; this made it possible to incorporate into the unit the external surface finish of glass mosaic which was fixed in the bottom of the mould prior to concreting. This finish would have been too expensive if applied *in situ* in the traditional way. The gable walls were to have a bush-hammered finish, but by pre-casting it has been possible to provide an exposed aggregate finish, giving a far more pleasing and uniform appearance.

The pre-casting of the external members, has made it possible to erect the structure without an external scaffold, all the temporary strutting being carried out from inside.

By pre-casting the external beams, the use of shuttering for the edge of the slab has been avoided, and the finish of the exposed faces greatly improved; the beams are pre-cast only to the soffit of the slab, which allows continuity steel to be provided over supports and into the slab. Wherever possible the balcony faces have been cast with the edge beams, so as to simplify bracing of the balconies during casting of the floor slab.

These balcony faces, together with some of the edge beams, have been cast in white cement, with special fluted faces.

#### Stair flights

The stair flights have been finished with the grano cast with the unit. The units are fixed as soon as the walls are cast, and before the floor above is constructed. Thus they provide access from the very outset of the job, and are not out of action while the finishes are being laid, a very important point if only one staircase is provided.

#### Cantilever balconies

The balcony face, and cantilever slab form one unit, thus obviating the difficulty of fixing the face separately. Projecting steel from the back of the slab is anchored into the *in situ* slab (5).

#### Chimney flue and refuse chute

The chimney flue has been cast in storey height lifts, and dropped over the molar brick lining. It has thus been possible to build the flue to the minimum size, and with a 1in air gap between the flue and the surrounding concrete.

The refuse chute has also been cast in storey height lifts, each unit being tied into the structure, and bedded on the one below.

#### Erection

The fixing operations are carried out by one tower crane working on each block, with a range sufficient to cover the whole of the building. The

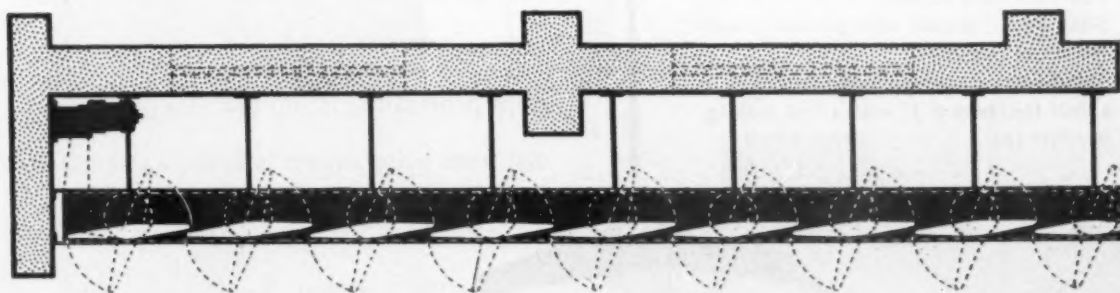
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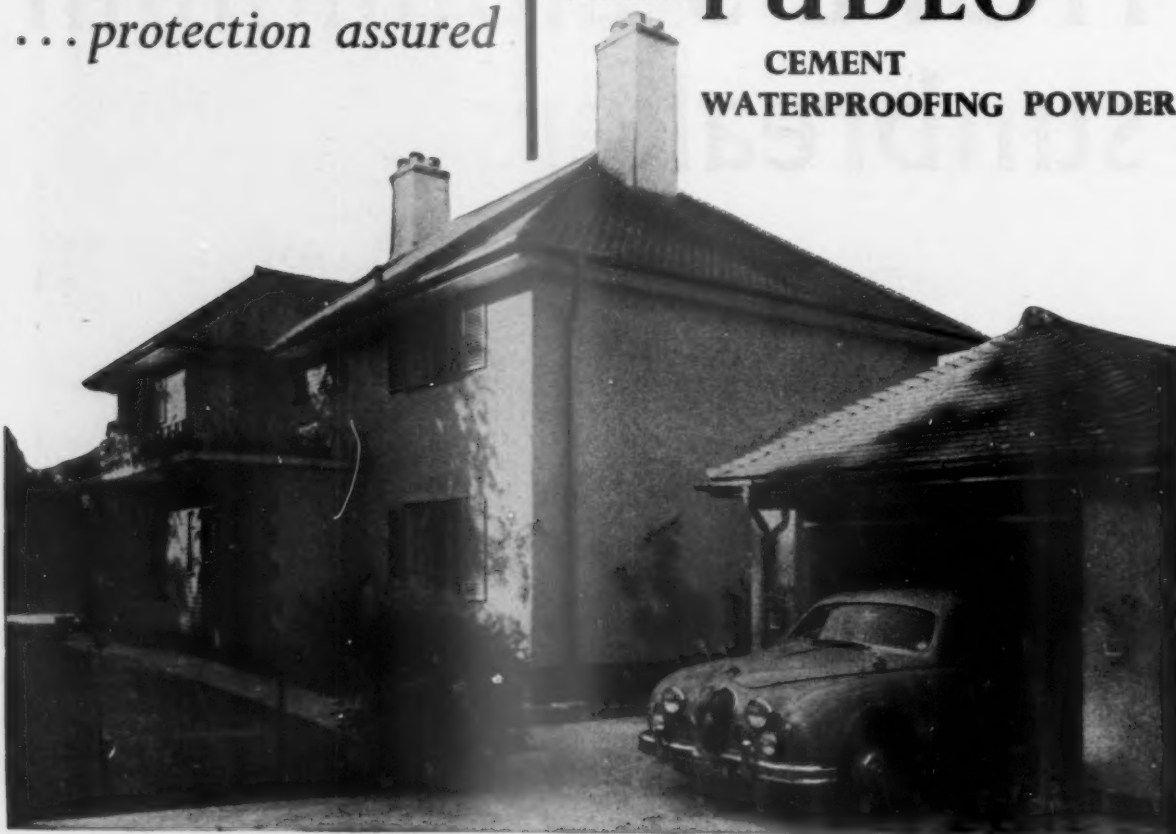


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5 lbs. 'Pudlo' cement waterproofer to each 100 lbs. of cement.

The rendering was applied in two coats to a total thickness of  $\frac{3}{4}$ " with a final dashing of white spar.

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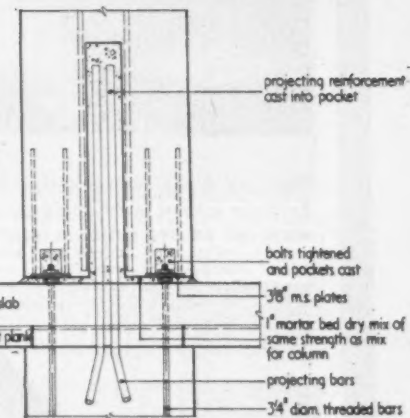
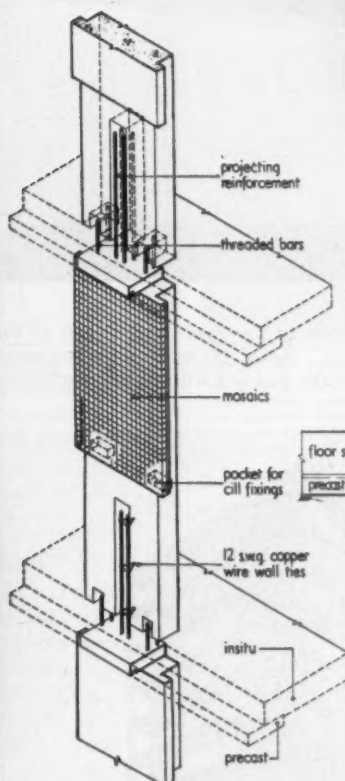
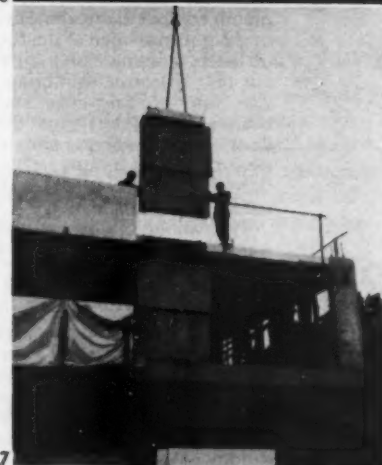
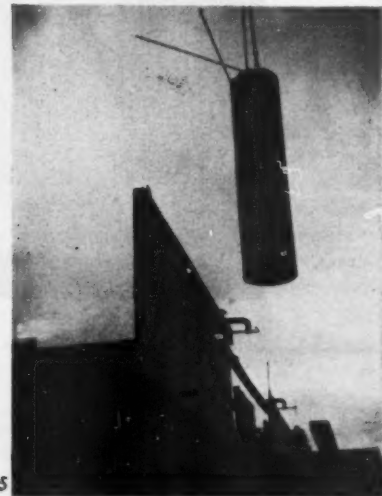
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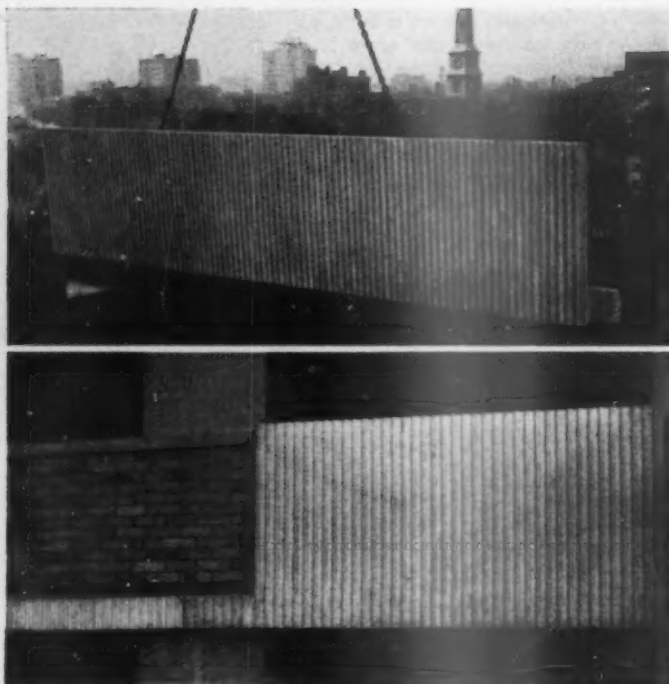


The conversion of the structural system into a prefabricated scheme in the short time available was made possible by the close team-work that came into being between the Architects, the Consulting Engineers, and the Contractor. F. L. Felgate, the District Surveyor for Finsbury, assisted greatly with sympathetic guidance and many helpful hints from the very first stages. Appreciation is given in particular to V. F. Dowsett (Felix J. Samuely and Partners), C. F. Neal (Manager R.C. Division of Wates Limited), W. Titley (Works' Manager of the Modular Concrete Co. Ltd.), and the teams on the site under the charge of E. W. Tyrrell.



DETAIL C: EXTERNAL COLUMNS





Top, one of the precast elements slung high over London (part of the Barbican scheme in the background). Below, the whole of the structural work was carried out from inside the building without any scaffolding



continued from page 218

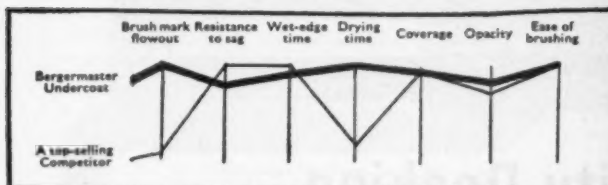
prefabricated units (see picture 2 on leading page) arrive by lorry on a public road existing to the south of the block and are lifted by the crane from the lorries and deposited in stacks between the building and the public road. On the other side of the building, where the future service road of the estate is situated, all other materials, such as bricks, partition slabs, windows, etc., are stacked. With this arrangement the crane is able to pick up all materials required and to deposit them on each floor in the necessary quantities before the next floor is cast. Subsidiary hoists are eliminated by this procedure (6).

The following erection sequence takes place on each floor:—(a) Lift column and wall units from stack and fix into place roughly in position, and strutted back as shown, each unit can be fixed in 5 to 10 minutes (7); (b) while this is in progress, steel and shuttering is being fixed, and *in situ* walls are being cast; (c) level and plumb column and wall units by means of the nuts provided at the four corners of each column, and tighten each nut (8); (d) erect shuttering for floor slab, and pre-cast edge and internal beams, also stair flights (9); (e) fix floor reinforcement, and continuity steel in top of beams; (f) cast floor slabs (10); (g) dry pack joints under column and wall units.

The whole of this structural work was carried out from inside the building without any scaffolding. A flying scaffold was only installed for the subsequent process of laying the bricks in the panels under the windows, which complete the elevational pattern of the building: white fluted balcony fronts, blue grey glass mosaic finish on the columns between the windows, and London Stock brickwork under the windows (11, 12, 13).

# How well does Bergermaster paint perform?

Better than the best of the rest. If that sounds like a facile bit of megalomaniac advertising chit-chat, look at the photos of undercoats and gloss alongside. These were arrived at during routine laboratory development tests against representative top-selling competitors. They weren't meant for publicity, but we'd be silly not to use them.



Our tests show, briefly, that Bergermaster has balanced seven conflicting but desirable paint characteristics. And that no one else has managed to do so to the same degree. The result is a tractable undercoat/gloss combination which produces an immaculate and durable finish. All other paints in the Bergermaster systems are of an equivalent standard, and the systems provide a finish for virtually every purpose.

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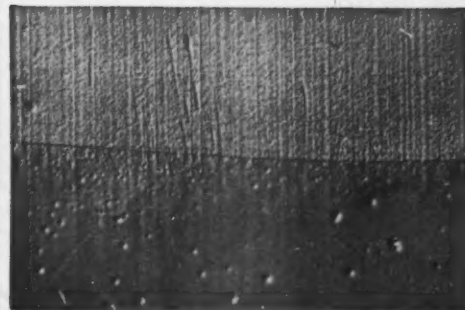
## What sort of service do you get?

A good one, free consultation and assistance with specification to site. Architects who aim to mix white from two spare Bergermaster blacks can call the Architectural Service Department for a snap judgement on their prospects. Books of divisible colour specimens, specifications and the like are readily available. Supply is now fast and dependable.

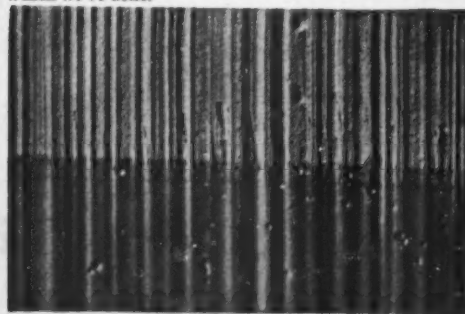
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**PROOF BY PHOTOGRAPHY**—these shots, highly magnified, are absolutely unretouched or rigged in any way. Random samples were painted onto identical test surfaces (vertical) with identical brushes under identical conditions. See how (above) Berger Undercoat goes on smoothly so that its top coat inherits no brushmarks, and neither coat suffers sagging. You get a first class finish, in contrast with, for example, that shown in the lower photo; a top-selling brand. Both show dust marks, inevitable when you magnify *without* retouching. Which we've done.



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**SIMPLICITY OF FIXING**

## **Atlas Insulated Cavity Decking**

**NON-CORROSIVE**

**FIRE RESISTANT**

## **Atlas Insulated Cavity Decking**

**HIGH THERMAL RESISTANCE**

**REQUIRES NO MAINTENANCE**

## **Atlas Insulated Cavity Decking**

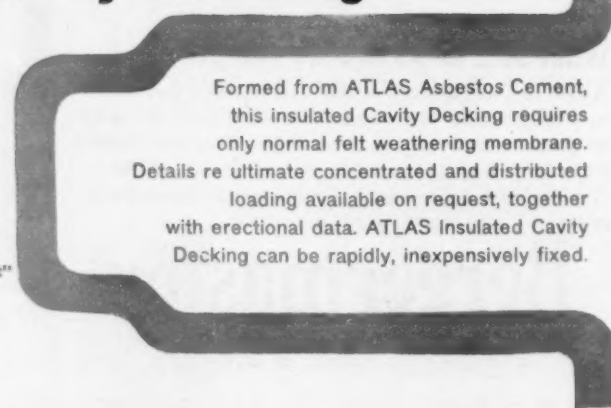
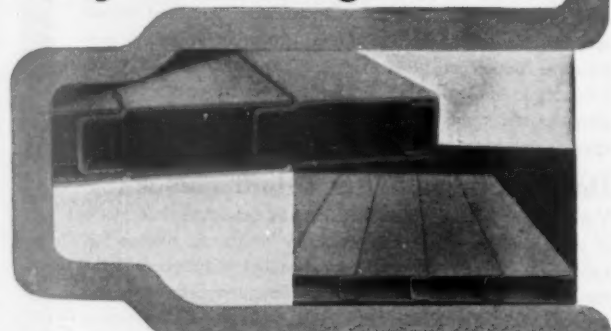
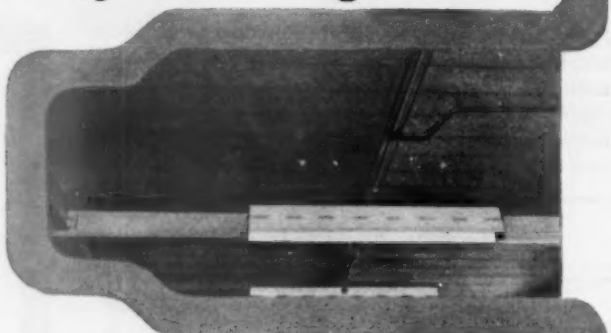
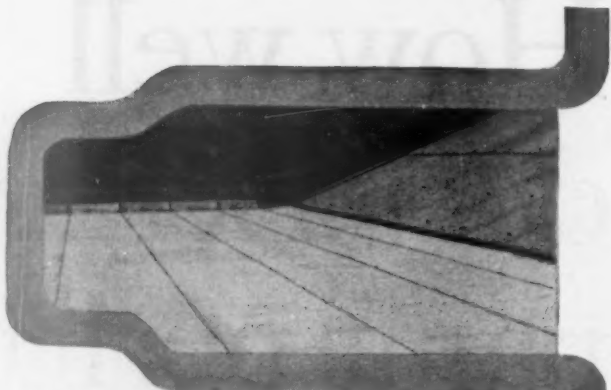


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LONDON, S.W.1**

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**WORKS AT: MELDRETH, NR. ROYSTON, HERTS.**

**ALSO AT: GREENHITHE, STROOD, CAMBRIDGE,  
SHORNE, RYE (SUSSEX), ST. YARMOUTH**



Formed from ATLAS Asbestos Cement, this insulated Cavity Decking requires only normal felt weathering membrane.

Details re ultimate concentrated and distributed loading available on request, together with erectional data. ATLAS Insulated Cavity Decking can be rapidly, inexpensively fixed.

● A.E.I.-Hotpoint have introduced a rental plan, in conjunction with Mercantile Credit Company, for their major domestic appliances. An initial deposit of 13 weeks' rent is required and thereafter a weekly rent is charged by the dealer varying between 6s and 12s according to the type of washing machine or refrigerator required. This reduces after three years to a nominal weekly figure to cover service costs. Initial enquiries should be made to the closest Hotpoint district office.

● A new company, known as the Northern Construction Company Ltd., has been formed in the Northern Region of Nigeria. The Northern Region Development Corporation, Taylor Woodrow (Overseas) Ltd., and The United Africa Company of Nigeria Ltd. are the partners and the management of the company will be provided by Taylor Woodrow. The encouragement of indigenous Northern contractors by sub-contracting operations and the institution of training schemes for the training of local technicians are amongst the aims of the new company.

● Armstrong Cork (Pty.) Ltd. is the name given to a new subsidiary of Armstrong Cork International, S.A., the Armstrong Cork Company's Swiss subsidiary. The new company will have headquarters in Johannesburg, and will be sales agent for all Armstrong products in Africa, south of the equator. Directors of the new company are Lambert G. Snow (managing), I. Wayne Keller, Fred M. Ritts, David E. Sanderson and Reginald E. Garwood.

*Recently completed 18,000 sq yd warehouse lined with Flamingo Foam and P.V.C.-faced plasterboard in the Grecon all-demountable metal fixing system. This system is a complete change from the traditional inverted T to its use in the upright position. This allows complete individual panel removability anywhere within the area*



● The Boards of directors of the two recently reformed products groups within the David Brown Corporation structure have now been determined. The board of David Brown Tractors Ltd. consists of:—Mr. David Brown (chairman and joint managing director), Mr. David Brown junior (joint managing director), Mr. J. Thompson (general manager), Mr. L. V. Gallagher (manufacturing) and Mr. J. D. Elstone (marketing). The directors of Aston Martin Lagonda Ltd. are Mr. David Brown (chairman and managing director), Mr. J. Wyer (general manager), Mr. David Brown junior, Mr. J. Thompson and Mr. J. Stirling.

● Recent management appointments by the Key Engineering Co. Ltd. include those of Mr. K. A. Skinner as general manager, Mr. H. L. Harclerode as general sales manager, Mr. F. V. Wickham responsible for technical development and Mr. G. H. Mortley as commercial manager.

● Turners Asbestos Cement Co. Ltd. have formed a special farm buildings advisory service operating from Trafford Park, Manchester. The service is under the control of Mr. David Lee and will deal with all problems connected with the use of asbestos cement products in agricultural buildings.

● R. A. Dyson & Co. Ltd. are to pay a final dividend of 12½ per cent, making a total of 21½ per cent for the year.

● Allan Kennedy & Co. Ltd., makers of mesh steel flooring and stairway treads, are paying a final dividend of 10 per

cent, making a total distribution of 15 per cent, less tax, for the year.

● The telephone number of the publicity department of Walker, Croswell & Co. Ltd. has been changed to Cheltenham 56366.

● The Gaylux range of plastic and P.V.C. covered bathroom and kitchen accessories is now being handled exclusively by M. M. Plastics (Sales) Ltd., 32 Southbourne Road, Sheffield 10 (Sheffield 65271).

● Mr. Douglas Miller, general manager of Lewis Berger (Scotland) Ltd., has been appointed a director of Lewis Berger (Great Britain) Ltd. and will also act as general sales manager. He will be succeeded as general manager of the Scottish company by Mr. E. A. Thomson, C.A.

● Following the recent fire at Duncan Tuckers' Pymore Mill, the loss has now been estimated as being in the neighbourhood of £60,000 to £70,000 and some 11,000 to 12,000 kitchen units have been completely written off.

● Mr. T. J. McArthur has joined the board of Blake Vitreous Enamelling Ltd., of Clayton-le-Moors, and will act in the capacity of general manager.

● As a result of their recently introduced 14 new colour schemes, Radiation Ltd. have reduced the price of the New World Rado-Vecta fire from £15 16s 9d to £13 16s 5d.

● H. Tiffin & Son Ltd., timber decay consultants and contractors of 37 George Street, London, W.1 (telephone: HUNter 1169) have now extended their operations to cover the whole of this country. Services offered include complete survey by experienced surveyors, eradication of wood borers and dry rot, opening-up, reinstatement, shoring and scaffolding, damp proof course insertion, the laying of suspended wood and concrete floors, fireproofing of timber in accordance with B.S. 476 : 1953 and the supply of a complete range of fluid preservatives.

● The 1960 Sales Conference of the Bath and Portland Stone Firms Ltd. included a talk on the use of Portland stone in modern architecture by Basil Ward, F.R.I.B.A., and a visit to the quarries on the Isle of Portland. During this visit the party inspected the automatic continuous process masonry plant recently installed by the firm to meet the tremendous stone requirements for cladding the Shell Centre now being erected on the South Bank in London.

## ADDENDUM

Referring to the Kingston Gas Boiler, described in New Products, A. & B.N., July 20, 1960, it should be noted that because of its B.Th.U. rating, the larger boiler is not subject to purchase tax, a fact which makes this appliance cheaper than the smaller No. 1 size which is subject to the tax.

*In this feature are reviewed new lines introduced to the building industry for the first time and additions or improvements to existing ones. Any advantages claimed for a product are from information supplied by the manufacturer*

#### Portable Electric Fire (A)

A new portable electric fire has been added to the Cosygro range. It has a visor guard and a heat dispersive reflector. Finish: black and red. Catalogue No.: D2819. Price (including P. Tax): £6 10s.

*The General Electric Co. Ltd., Magnet House, Kingsway, London, W.C.2. Temple Bar 8000.*

*Readers' Information Service, Ref. A. Date 17/8/60.*

#### Insulating Material for Floating Floor Constructions (B)

Stilphon 20 is a new load resisting mineral wool mat developed for use as a thermal/acoustic leaf in floating floor constructions and as an insulation for underfloor heating systems. It consists of a resilient layer of fire-proof mineral wool insulation and is supplied in standard 36in wide rolls in thicknesses of 1in, 1½in and 2in. The material complies with B.S. 1521: 1949 Class B in that it has a covering of stout waterproof paper and is ready to take a concrete screed. An adequate flange is provided along one edge of the top layer of paper to overlap and seal the butt joints. It has a fibre content of 7lb/cu ft density which provides the mat with the ability to retain an effective thickness under the loading of a concrete floor screed. K value: 0.23. Cost: 3s 4d per sq yd approx. at 1in thickness.

*Stillite Products Ltd., 15 Whitehall, London, S.W.1. Whitehall 0922.*

*Readers' Information Service, Ref. B. Date 17/8/60.*

#### Electrical Heating Unit (C)

Universal U is a new type of domestic heating unit consisting of 12ft of electrically heated tube fabricated in one continuous length but bent to form a double "U" with an area of 36in by 19in. It has a low surface temperature of 160 deg F and a loading of 110W. It can be used as a towel rail in the bathroom or kitchen, as a heater for the lavatory or garage, or as an ailer. When used in bathrooms it should be permanently installed and correctly earthed. It has a patented type tape element and is supplied complete with five bright plated fixing brackets. Finish: stove enamelled white. Price (including P. Tax): £5 19s 6d.

*Hurseal Ltd., 229 Regent Street, London, W.1.*

*Readers' Information Service, Ref. C. Date 17/8/60.*

#### Polyethylene Resin

Bakelite Polyethylene resin PY300 has been formulated for use in producing a tough, high impact film for pre-packing and industrial applications in the packaging industry. It is claimed that tests have shown that the new resin will produce a standard clarity film of exceptionally high impact strength, in thicknesses down to 100g, without sacrificing extrudability or other desirable fabricating properties. The extra strength of this new grade means that spoilages caused by physical damage to wrappings and bags can now be greatly reduced. Bags based on the new product can be handled easily on all types of bag filling equipment. Other uses for films incorporating PY300 will be in the handling of hygroscopic materials, as backings for industrial tapes and for applications in the building and agricultural industries. Makers' advance information sheet D48 is now available.

*Bakelite Ltd., 12-18 Grosvenor Gardens, London, S.W.1. Sloane 0898.*

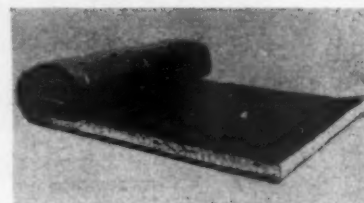
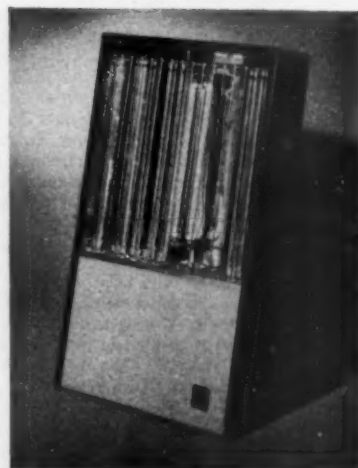
*Readers' Information Service, Ref. D. Date 17/8/60.*

#### Electrical Accessories

Various new items have recently been added to the MK range of electrical accessories. No. 2032 conversion box will allow flush two-gang 13A socket outlets or two-gang 13A switch socket outlets to be surface mounted. Price: brown, 2s 8d; ivory, 3s. No. 2011 moulded box will allow three- and four-gang oblong flush plaster-depth plate switches to be mounted as surface type. Price: brown, 2s 4d; ivory, 2s 8d. No. 735 is a circular 13A shuttered socket outlet designed for panel mounting. Price: brown, 3s 2d; ivory, 3s 9d. No. 2034 shallow mounting frame enables any MK accessory with two 4BA fixing holes on 2½in centres to be mounted on a plaster-depth box. Price: brown, 1s 2d; ivory, 1s 4d. No. 2200 is a steel frame, zinc plated for use with accessories having 2½in fixing centres and particularly for mounting 13A socket outlets on trunking. Price: 1s. No. 991 flex outlet plate incorporates 13A cartridge fuse-link with a 7/16in dia aperture for the outlet of flexible cord. There is a variable flex grip to secure flex cord. They will fit a B.S. 1299/1363 box. The plate measures 3½in by 3½in with two 4BA fixing holes at 2½in centres. Price: brown, 8s; ivory, 8s 4d.

*MK Electric Ltd., Shrubbery Road, London, N.9. Edmonton 5151.*

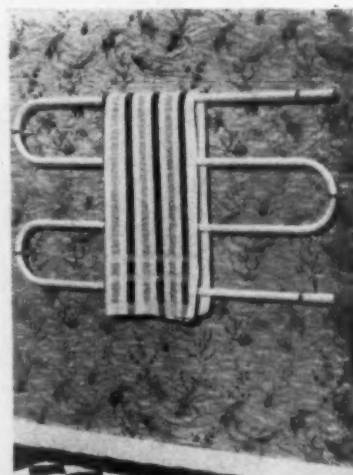
*Readers' Information Service, Ref. E. Date 17/8/60.*



Top: D.2819 portable electric fire by G.E.C. (A)

Centre: Stilphon 20 mineral wool insulation mat (B)

Below: Hurseal's Universal U electrical heating unit (C)





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\* The Thermal Insulation  
(Industrial Buildings) Act 1957

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C115

Continuous vertical retest structure and supporting steelwork, at Looch Hall Works, Preston; Denso protected by The Denso Contracting Department. Photograph by courtesy of The North Western Gas Board.

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DUBLIN Tel: 61768

*Agents throughout the Commonwealth*

*Roof stanchions and other steelwork in this main reservoir Denso protected by the Denso Contracting Department. Photograph by courtesy of Widnes Corporation Waterworks.*

**Above ground**

**Underground...**

**Underwater...**

consult

**G.E.C.**

about industrial electric  
**Water heating**

THE GENERAL ELECTRIC CO. LTD., MAGNET HOUSE, KINGSWAY, LONDON, W.C.2

## New Fan Heater (F)

Model DM242 fan heater is another new season's addition to G.E.C.'s range of electric heaters. It has a variable thermostat control and safety cut-out. An illuminated grill acts as a pilot light and the use of an induction motor avoids interference with radio or television reception. In summer, the heating element can be switched off and the fan only operated. Loading: 2kW. Voltages: 200/220 and 230/250 a.c. only. Finish: red and cream. Price (including P. Tax): £9 17s 6d.

The General Electric Co. Ltd., Magnet House, Kingsway, London, W.C.2. Temple Bar 8000.

Readers' Information Service, Ref. F. Date 17/8/60.

★

## Forced Air Heater (G)

A portable tangential fan heater has been added to the Ekco range of electrical heating equipment. The design embodies a high efficiency cross flow or tangential turbine fan which is claimed to be silent in operation, and provides a smooth flow of air over a wide area. There is a 2kW heating element which, in conjunction with the fan, provides rapid room heating and can also be operated either at half heat or switched off altogether, to allow the fan only to be used. The heater can either stand on the floor or be suspended from wall brackets or picture rails. Its body is swivel-mounted on a tubular stand and can be adjusted to any desired angle. There is a heat selector knob on the side of the body, a thermal cut-out for switching off the heater should the air flow be accidentally obstructed and a conveniently balanced handle. The tubular stand is chromium plated and is provided with rubber protectors to avoid marking the floor or wall. Finish: stove enamelled beige with gold colour outlet grill. Fan motor rating: 35W. Overall measurements: 11½in by 10½in by 10½in. Voltages: 220/240V a.c. 50 cycles. Price: £11 15s (including P. Tax).

E. K. Cole Ltd., Southend-on-Sea, Essex. Southend 49491.

Readers' Information Service, Ref. G. Date 17/8/60.

★

## Louvre Ventilator (H)

Greenwood-Airvac movable louvre ventilators can be assembled together from a selection of standard units to make multi-panel louvred ventilators of varying sizes. The units are constructed throughout of aluminium and the louvre box depth is 2½in. Multi-panel weathering is ensured with P.V.C. or similar sealing strip which is provided in the purpose made grooves in the louvre box sides. Horizontal

joints are weathered by a turn-down edge along the bottom of each unit. The movable louvres are arranged on 3in centres with an 18g louvre box and 20g louvres. Horizontal and vertical panelling is secured by 1½in by ½in and ½in by ½in nuts and bolts respectively. Bird guards are fitted to the front faces of louvres when supplied as single units or for assembly into panels. Light adjustable 16g building-in cleats are available as required. Standard Unit sizes (height by width): 12in by 15in, 18in by 15in, 18in by 18in, 24in by 18in and 24in by 24in.

Greenwood's and Airvac Ventilating Co. Ltd., Beacon House, Kingsway, London, W.C.2. Chancery 8135.

Readers' Information Service, Ref. H. Date 17/8/60.

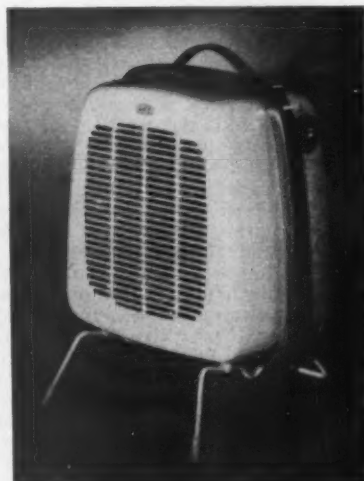
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## Reproduction Material

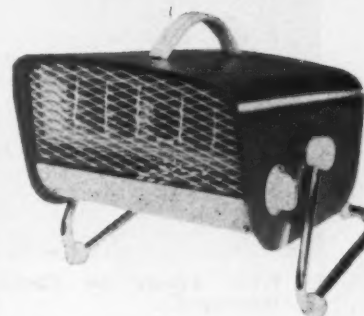
Durafilm is a dimensionally stable film for the use of draughtsmen. It has been developed from I.C.I.'s base material Mellinex and is claimed to be virtually indestructible in that it will not tear, crack or turn opaque. Several grades are available, A being a translucent material for plan printing. It is prepared with a variety of diazo emulsions and developed by ammonia vapour. It has a matted surface for ink or pencil and is fast in printing. SD is a double-matted plan printing material prepared for use on semi-dry developers of the chemical type, thus permitting the production of high-grade masters or intermediates without the disadvantage of ammonia fumes. It is fast printing and will take ink or pencil work. D is suitable for drawing and takes either pen, pencil or type. It is treated with an anti-static compound to improve its resistance to dirt. It is fast in print use and when used with high-contrast diazo paper, produces prints of uniform quality and maximum contrast. CSE is for photographic work and is coated with a high-contrast emulsion with a matt surface. The material is backed for anti-curl and anti-halation. Its speed is similar to Criterion No. 1 Normal Contact Document paper. PSE is also for photographic work and is similar to CSE but coated with a fast high-contrast emulsion for camera work. It has the speed of Criterion No. 2 Projection Document paper. DP, again for photographic work, is a direct positive silver material with a special emulsion giving direct facsimile copies, i.e. negative from negative or positive from positive. It can be used in ordinary tungsten lighting and neither safelight nor darkroom are required.

E. N. Mason & Sons Ltd., Arclight Works, Colchester, Essex. Colchester 5191.

Readers' Information Service, Ref. I. Date 17/8/60.

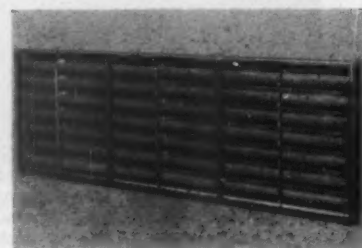


Top : DM.242 fan heater by G.E.C. (F)



Centre : Portable tangential fan heater by E. K. Cole (G)

Below : Movable louvre ventilator by Greenwood's & Airvac Ventilating Co. Ltd. (H)





**Electric Convector Heaters (J)**

A new range of Electroway electric convector heaters has recently been introduced. There are four models in the range with casings of pressed steel welded construction mounted on die cast aluminium feet. All models are fitted with amber glow lamps and have outlet grilles. They may also be converted to wall mounting types and conform to B.S. 1670 : 1956. Models 81 and 81S are both rated at 1kW, the former having no control switch whilst the latter has a half-heat switch. Overall measurements (both models) 25in by 15in by 9½in. Weight (both models): 14lb. Price (including P. Tax): 81—£5 17s 9d; 81S—£6 6s 8d. Model 82T (illustration) is rated at 2kW and has a variable thermostat control. Overall measurements: 25in by 26in by 9½in. Weight 21lb. Price (including P. Tax): £9 7s. Model 83T is rated at 3kW and has variable thermostatic control. Overall measurements: 25in by 37in by 9in. Weight: 28lb. Price (including P. Tax): £13 6s 3d. Finish (all models): stove enamelled polychromatic golden beige with gold anodised aluminium outlet grille.

*Electroway Heaters Ltd., Rosebery Street, Loughborough, Leicestershire.*  
Readers' Information Service,  
Ref. J. Date 17/8/60.

\*

**P.V.C. Former for Electric Floor Warming (K)**

Tyrad have produced a new former for retaining the heating cables in position during installation of their floor warming system. It is made from extended "T" section P.V.C. and is slotted at intervals to take the heating cables. Vertical flanges are slotted to receive and trap the element and horizontal flanges are provided for fixing to the sub-floor. Fixings to concrete sub-floors should suit individual installations and spacing of 9in is recommended. If the formers are fixed across each end of the element runs, the element can be strung backwards and forwards through the slots and maintained firmly in position whilst the floor screed is laid. This plastic former, if fixed to a batten, can be used over and over again and will not be affected by wet screeds. Price: 1s per ft.

*Tyrad Electric Ltd., Imperial Court, Basil Street, Knightsbridge, London, S.W.3, Kensington 3444.*

*Readers' Information Service,*  
Ref. K. Date 17/8/60.

\*

**Infra-red Radiant Heaters (L)**

Three infra-red radiant heaters have been added to the Sofono range. They are known as Jupiter heaters and comprise a pendant, a wall mounting and a portable free-standing model, all with perforated element guards. The pendant heater is designed for

industrial, commercial and agricultural use. It has an easy-to-clean reflector, giving a wide beam of radiance and the position of the end terminal block is stated to reduce installation charges since a shorter cable is required. Finish: gun metal grey enamel. The wall mounting model (illustration) and the portable free-standing model are designed for domestic use. The former is recommended by the makers for kitchen and bathroom use and the reflector which has a wide angle of adjustment can be locked in any position. It has a nylon cord pull switch and an on/off indicator. The portable model is mounted on four chromium plated legs and again provides a wide beam of radiant heat. Both these domestic models are available in three enamel colour finishes, flame, Mocha and cloud grey. All models are made in two sizes, 750W and 1,500W, overall dimensions being common to all three. Overall dimensions: 750W—31½in long; 1,500W—44½in long (other measurements in all cases being 5in wide by 5½in deep respectively). Voltages: all models are suitable for voltages of 200/220 and 230/250 a.c. whilst the pendant model and the portable heater are also suitable for d.c. operation. Retail prices (for 750W models): pendant model—£4 5s, wall mounting model—£5 7s 9d, portable model—£6 18s. The 1,500W models have not yet been priced as they may not be available before next year.

*Sofono Electrical Division, Federated Foundries Ltd., 4 Stratford Place, London, W.1.*

*Readers' Information Service,*  
Ref. L. Date 17/8/60.

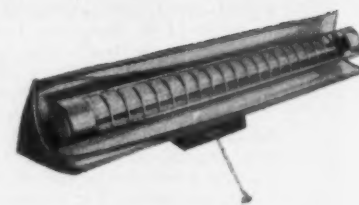
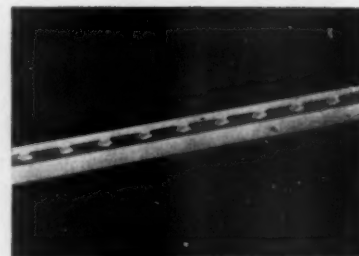
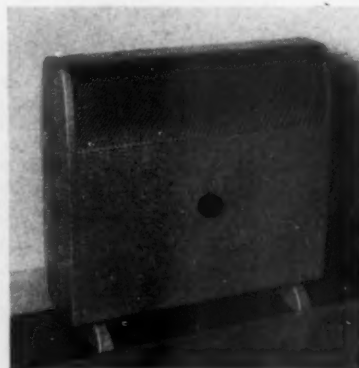
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**Flexible Pipe Bandages (M)**

Two additional items have been added to this firm's range of flexible pipe bandages. The first of these is a scrim backed felt (outside right of illustration). It is cheaper than a hessian backed felt and has a cotton scrim stitched on one side with approximately 1in overlap. It is supplied in 24ft long rolls by 4in wide. The second is a plastic backed lagging felt (outside left, illustration) and this has heavy grade washable white plastic stitched on one side with approximately 1in overlap. It is supplied in 24ft long rolls by 4in wide. A third new product which has been produced is a flexible foam plastic (illustration, centre foreground) and is supplied complete with fixing tapes in ½in thickness and in rolls 9ft long by 3in wide. Trade price per roll, in lots of 50 rolls: scrim backed felt—3s 10d, plastic backed felt—4s 8d, foam plastic—1s 8d.

*PH Thermal Products Ltd., Browgate, Baildon, Yorkshire. Shipley 53195.*

*Readers' Information Service,*  
Ref. M. Date 17/8/60.

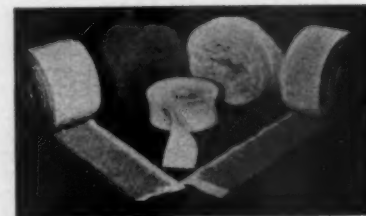


Top : Electric convector heater by Electroway Heaters Ltd. (J)

Centre : P.V.C. former for electric floor warming installations, by Tyrad Electric Ltd. (K)

Bottom : Jupiter wall-mounting infra-red heater by Federated Foundries Ltd. (L)

Below : Flexible pipe bandages by P. H. Thermal Products Ltd. (M)



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"They meet all the demands of modern distribution systems, and they're good-lookingers too. Thanks a lot G.E.C."

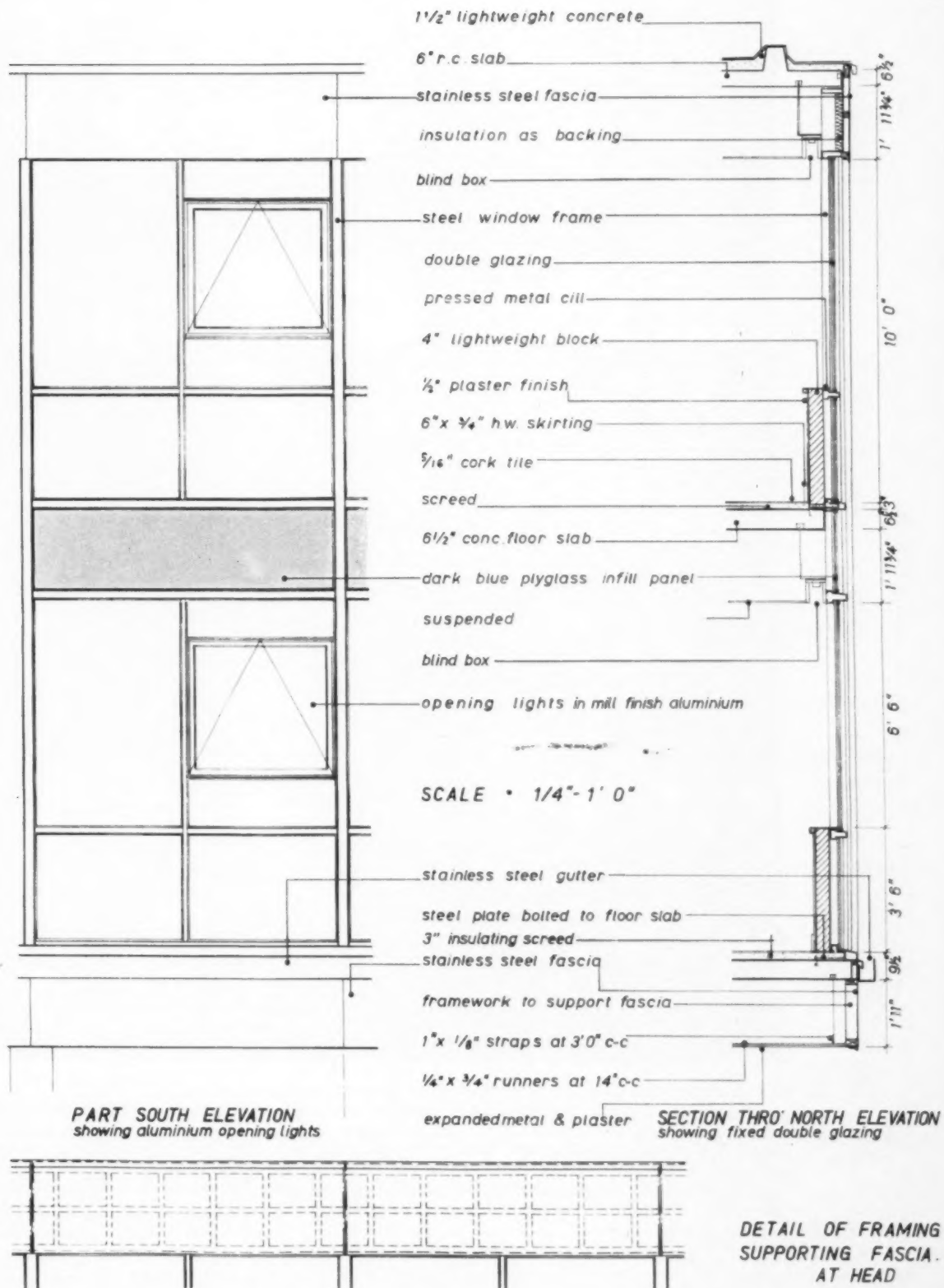
**G.E.C.**

**INSTALLATION EQUIPMENT GROUP**

THE GENERAL ELECTRIC COMPANY LIMITED, MAGNET HOUSE, KINGSWAY, LONDON, W.C.2

SWITCH AND FUSE GEAR  
H.R.C. FUSES  
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RISING MAINS  
CONDUIT  
PIRELLI-GENERAL CABLE  
CABLE TRUNKING  
UNDER-FLOOR CABLE DUCTS  
ELECTRIC WIRING ACCESSORIES  
BELLS







The north and south elevations of the new offices for the Department of Architecture & Planning at Coventry are apparently identical. The north side, however, is completely double-glazed and has no opening lights, whereas these occur on the south and the glazing is single. This arrangement not only cuts down heat losses on the north but also excludes traffic noise from a very busy road. The south side of the building faces a courtyard. Roller Holland blinds are used on the north elevation and Venetian blinds to the south. The steel window frames are painted white with opening lights in mill-finished aluminium; spandrel panels are dark blue. Architect: Arthur Ling, Coventry City Architect

# 4 TYPES of CLOSEBOARD FENCE KITS

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## Contract News

### WORK IN PROSPECT

**Armagh U.D.C.** Erection of 95 houses in Hamiltonsbawn Road.

**Birmingham Corporation.** The health committee has approved a plan for a junior training centre in Reservoir Road, Erdington, estimated cost for building £28,826.

**Bradford C.C.** The health committee has approved plans for an ambulance station in Northside Road, estimated cost £95,000.

The public works committee has approved a scheme for a stone-built public shelter in Mayo Avenue/Manchester Road, estimated cost £1,000.

**Coleraine, Co. Londonderry.** The Ministry of Housing has approved the erection of 22 houses and eight garages at Claragh.

**Eccles Corporation** has approved plans for the proposed school clinic and child welfare centre in Corporation Road/Barton Lane.

The housing committee has approved a layout plan for 18 houses on the Winton Grange site.

**Glasgow Corporation.** The Scottish Garden City Housing Society Ltd. are to erect 16 houses in Curzon Street, Ruchill, for disabled ex-servicemen.

The housing committee has approved layout plans for 18 three-apartment houses and 25 one-unit garages in Robroyston Avenue, 20 aged persons' flats in Dee Street, 30 three-apartment houses in Dundee Drive, 36 three-apartment houses and 14 one-unit garages in Cockenzie Street.

**Hastings Corporation.** Alterations to No. 41 Wellington Square to provide improved office accommodation for council departments, estimated cost £8,200.

The housing committee has approved an amended layout for traditional dwellings at Broomgrove, to provide eight one-bedroom flats, 12 two-bedroom flats, two-bedroom houses, 30 three-bedroom houses and four four-bedroom houses.

**Hull Corporation.** The education committee has approved a proposal for a training centre for seamanship at Welton Waters.

**Lisburn, Co. Antrim.** Erection of 124 dwellings and 43 garages, together with roadworks and siteworks at Warren Park. Apply to Town Surveyor, Lisburn U.D.C., Town Hall, Lisburn.



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**Middlesex C.C.** The estates and housing committee has approved a scheme for a general purpose building at Chase Farm, Potters Bar, estimated cost £2,200.

The smallholdings committee has approved the erection of a second glasshouse with extensions of the existing heating plant at the Little London Nursery, Moorcroft estate, estimated cost £1,250.

**Morecambe & Heynsham Corporation** has approved in principle a proposal by (a) The Ministry of Works for a telephone exchange on part of the gas works site, Moss Lane; (b) The Lancashire County Council for a library on part of the site.

The health committee has approved a plan for the reconstruction of the slaughterhouse in Schola Green Lane.

**Reading Corporation** (a) has approved a scheme for a civil defence depot in Abattoirs Road, providing garage accommodation on the ground floor and facilities for training and social activities on the first floor, estimated gross cost £20,740; (b) is to erect a county primary school for about 150 children of both sexes.

The Ministry of Education has approved the proposed extensions to St. Anne's R.C. school, estimated cost, including fees, £20,865.

**South Shields Corporation.** The Ministry of Education has approved plans for the third stage of buildings for the Marine and Technical College, estimated cost £398,353.

**Strabane, Co. Tyrone.** Erection and completion of Evish primary school. Apply Corr & McCormick, Architects, 7 Ferry-quay Street, Londonderry.

**Wallasey Corporation.** The borough architect is to prepare detailed plans and invite tenders for a football pavilion in Central Park.

The parks committee has approved outline plans for a sports pavilion at Lingham Park. Tenders are to be invited.

### SUBMISSIONS FOR PLANNING AND BYE-LAW APPROVAL

**Bexhill-on-Sea Corporation.** Plans submitted for (1) erection of 21 dwellings off Seabourne Road for Provincial Properties (Bexhill) Ltd.; (2) outline application to erect (a) three pairs of semi-detached houses and garages in North Road/Glovers Lane for the Corporation; (b) shops with flats in Pear Tree Lane for Mr. F. Walter; (c) four flats and garages in Cooden Drive for Calverley Constructions Ltd.; (d) block of 18 flats in Hastings Road for Mr. H. J. White; (3) conversion of (a) No. 50 Wilton Road into three semi-contained flats for Mrs. M. S. Green; (b) No. 14 Cranfield Road into five aged persons' flatlets for the Corporation; (4) demolition of No. 4 Brockley Road and erection of 10 flats and garage for Mr. W. Read.

**Carlisle Corporation.** Plans submitted for (1) erection of (a) annexe to George Moore and Dean Close Wards at

Cumberland Infirmary, submitted by the divisional architect for Special Area Committee, Newcastle Regional Hospital Board; (b) bank in Lowther Street, Messrs. W. & S. Owen for Westminster Bank Ltd.; (c) 12 garages and 12 flats in London Road, Mr. A. Sewell for Border Engineering Contractors Ltd.; (d) television centre at Durranhill, Mr. E. M. Lawson for Border Television Ltd.; (2) extension to workshop in Thomas Street for Kentmere Ltd., submitted by Mr. W. R. Jeffrey; (3) outline application for a showroom, workshops and store at Peteril Bridge Goods Yard, London Road, submitted by Mr. F. G. Jackson for S.M.T. Ltd.

**Caterham & Warlingham U.D.C.** Plans submitted for (1) erection of (a) 17 one-unit garages in Harrow Road, Warlingham; (b) shop, offices and flat in The Square, Caterham; (c) clinic and branch library in Stafford Road, Caterham; (2) demolition of existing cottages and erection of three pairs of semi-detached houses with six garages in Commonwealth Road, Caterham; (3) outline application to demolish Well Farm Cottage and Ashbourne and erect three-storey office block.

**Dagenham B.C.** Plans submitted for erection of (a) furniture factory and office block in Fowler Road, Hainault Industrial estate for Durable Suites Ltd.; (b) shops with showrooms or offices over at Heathway Station for Covered Markets Ltd.; (c) two-storey office block at Frasers Works, Rainham Road South, submitted by John Lysaght's (Service) Ltd.; (d) seven houses and 10 garages at Marlyon Road, Hainault for the London County Council.

**Eccles Corporation.** Plans submitted for erection of (a) adult training centre at Chorlton Fold, for the county council; (b) 22 houses in Grange Road for Mr. K. Flittercroft; (c) despatch building and office block at Bentcliffe Works, Salters Lane for Lankro Chemicals Ltd.

**Exeter C.C.** Plans submitted for (1) erection of (a) shop and flat, eight flats and nine garages in Topsham Road; (b) 64 dwellings and 52 garages on the Broadfields estate; (c) five bungalows and garages on the Barley estate; (d) two additional growing houses at Gernleigh Nurseries, Ludwell Lane; (e) 11 bungalows, 11 houses and garages on Lower Hill Barton estate; (2) remodelling of the west wing of Northbrook school, Beacon Lane; (3) revised layout for 24 dwellings on Lower Hill Barton estate; (4) conversion of No. 19 Victoria Park Road into four flats.

**Greenwich B.C.** Plans submitted for (1) erection of (a) block of 12 flats and two ranges of seven garages in Morden Road; (b) 16 flats, 11 one-unit garages with access from Farjeon Road and petrol service station with access from Shooter's Hill Road and Farjeon Road; (2) outline application for erection of workshops, general and drawing offices, assembly shops, laboratory, etc., in Penhall Road.

**Hull Corporation.** Plans submitted for erection of (a) single-storey paint shop in Lime Street for Kingston Lamp Co. Ltd.; (b) 24 one-unit garages in Astoria Crescent, Shaftesbury Avenue for N. W. Jackson; (c) Sunday school premises and hall for church and youth activities in

Church Street, Sutton; (d) office and lavatory block in Cumberland Street for K. W. Rooms; (e) cold store in Walcott Street for J. Marr & Son Ltd.; (f) factory and offices in Reservoir Road, and Clough Road for The Cresta Caravan Co. Ltd.; (g) six shops with ancillary buildings in Prospect Street/Wright Street for Town Centre Securities Ltd.

**London C.C.** Plans submitted for (1) erection of (a) offices in Finsbury Square and Fulham; (b) theatre, shops, flats, showroom, local authority garage and car park in Drury Lane and Parker Street; (c) transit hotel in Cromwell Road and Knaresborough Place, Kensington; (d) housing, shops, offices and light industry in Reedworth Street, Wincott Street, Renfrew Road, Gilbert Road and Kempford Road, Lambeth; (e) tube station buildings and office block at Lambeth North tube station and Westminster Bridge Road, Lambeth; (f) 17-storey blocks of flats in Avenue Road, St. Marylebone; (g) showrooms, offices and hotel in Lisson Grove and Bendall Mews, St. Marylebone; (h) flats and maisonnettes and petrol filling station in Seven Sisters Road, Stoke Newington; (i) residential development at The Priory, Upper Richmond Road, Wandsworth; (j) 23 houses and four eight-storey blocks of flats in Dulwich Wood Park, Farquhar Road and College Road; (k) flats and garages in Marlborough Street and Ixworth Street, Chelsea; (l) division police station in Wood Street/Love Lane, City; (m) borough council housing in Stoke Newington, Roman Road area, Poplar and Harman Street area, Shore-ditch; (n) flats and basement garage in Bryanston Square, St. Marylebone; (o) multi-storey car park in Harley Street and Queen Anne Street, St. Marylebone; (p) 22-storey offices in Victoria Street and The Broadway; (q) nine-storey flats in Westleigh Avenue, Wandsworth; (2) rebuilding of Royal Palace Hotel in Kensington High Street.

**Mansfield Corporation.** Plans submitted for (1) erection of a factory (a) in Moor Lane for Maun Industries Ltd.; (b) off Southwell Road West for Foister, Clay & Ward Ltd.; (2) erection of (a) four houses in Westdale Road for V. G. Yeomans; (b) offices, showroom and stores at Padley Hill and Stockwell Gate for J. Bower Ltd.; (c) foundry warehouse in Union Street and Plantation Street for Under-Pressure Engineering Co. Ltd.; (d) public house in Westfield Lane/Redgate Street for Hardy's Kimberley Brewery Co. Ltd.

**Milford Haven U.D.C.** Outline application submitted for showroom, offices, flats and filling station in Great North Road for Gibson & King Ltd.

**Newbury Corporation.** Plans submitted for (1) extension to factory in London Road for Wrappings & Packings Ltd.; (2) replacement of garage block in London Road for Wheelers (Newbury) Ltd.; (3) outline application to erect two-storey office block in West Street for Rishton Management Ltd.

**Paddington B.C.** Plans submitted for (1) conversion of hotel at Craven Hill to form 12 semi-contained flats; (2) redevelopment of 21/31 Moscow Road to provide shops and residential accommodation.

**Redditch U.D.C.** Plans submitted for (1) construction of office block and alterations to offices at Church Green East for Martin & Pethard Ltd.; (2) final stage of construction of Bacon and Food factory in Arthur Street for W. H. Smart & Co. Ltd.

**West Bromwich Corporation.** Plans submitted for (1) erection of (a) offices in Tame Street, submitted by K. Brace for E. W. Turner & Co.; (b) foundry at Bromford Lane for Bromford Iron & Steel Co. Ltd.; (c) three-storey block of 12 flats with 12 garages in Newton Road, submitted by C. C. Gray for W. Bullock; (d) three shops with storage accommodation over at Carters Green, Scott & Clark for W. Woodward; (f) offices and laboratory in Great Bridge Street, P. G. Marks for B. A. Taylor (Metals) Ltd.; (g) single-storey factory with two-storey office block in Park Lane; (h) factory, warehouse and offices in Park Lane for Henry Shewell Ltd.; (i) petrol filling station in Vicarage Road, Harry Weedon & Partners for Enterprise Garage (West Bromwich) Ltd.; (j) three-storey block

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**Westminster C.C.** Plans submitted for erection of (a) shops, bank and offices in Victoria Street; (b) shops, showrooms, offices and flats in the Strand and Southampton Street.

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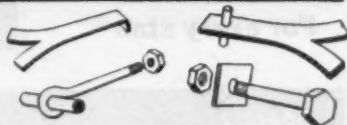
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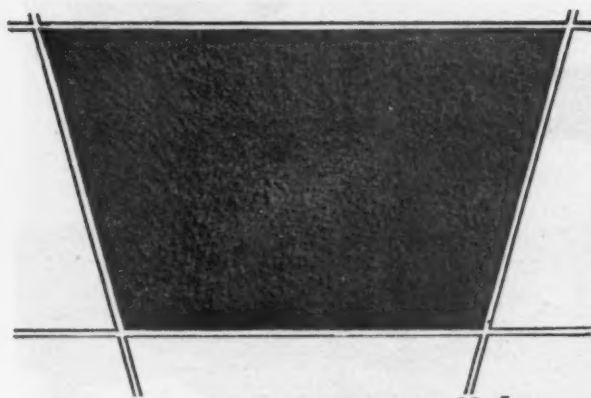
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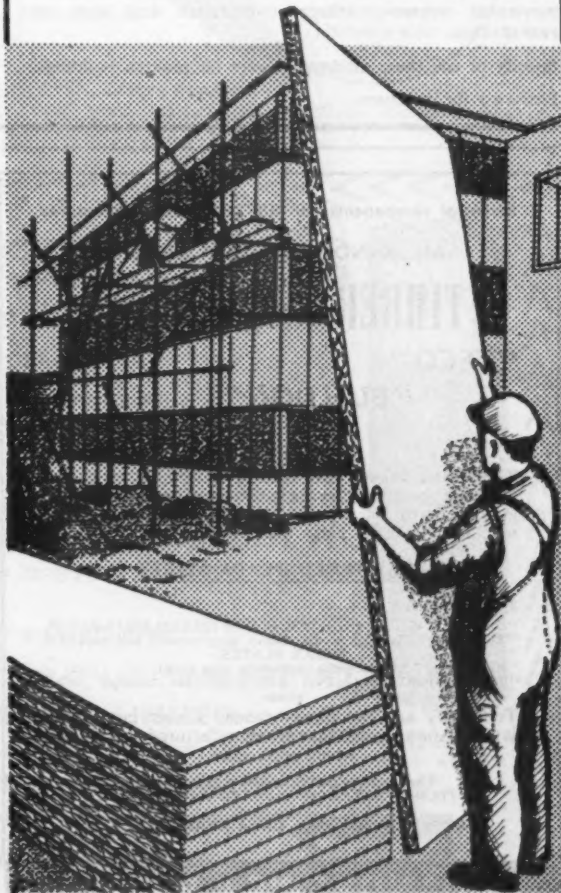
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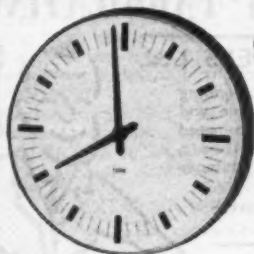
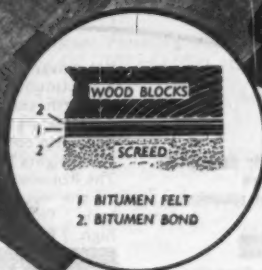
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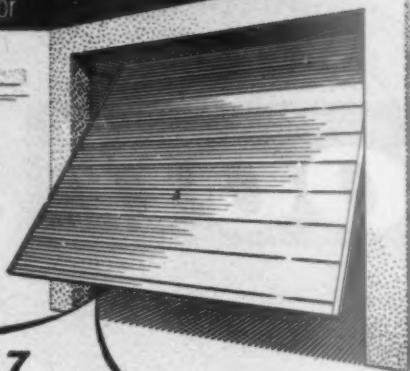
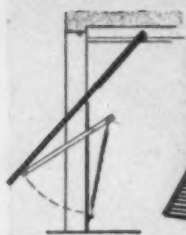
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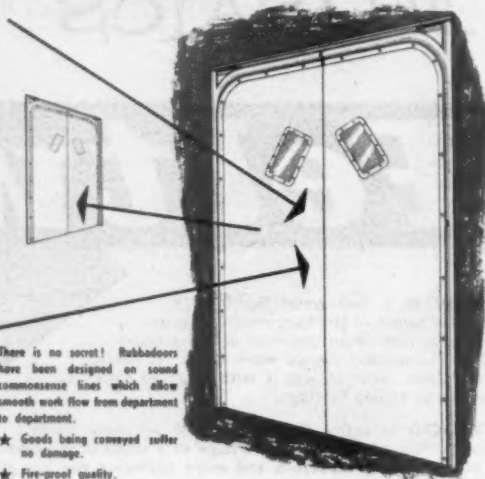
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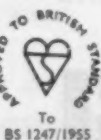
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# Official Announcements

APPOINTMENTS      CONTRACTS      TENDERS

Close for press • first post Monday for following Wednesday issue.      Rates • 25s per inch and pro rata, minimum half inch.

## APPOINTMENTS

### Warwickshire County Council Architect's Department

(a) **Deputy Group Architects** (two), Grade A.P.T. IV-V (£1,065-£1,375). Applications are invited from qualified and experienced architects for these posts, which are for the groups handling projects for the Council's education building programme.

In each case the post is one of responsibility requiring a high degree of initiative and design ability in up-to-date forms of construction, use of materials, control of costs, job planning and organization. The successful applicant will also be expected to deputise generally for the group architect.

(b) **Architects**, Special Grade (£785-£1,070).

Applications are invited from architects who have passed Parts I and II of the R.I.B.A. final or special examination or their equivalent at one of the recognized schools of architecture. The successful applicants will work in groups on large projects, and an opportunity will be given to men with enthusiasm and ability to design and carry out projects under a group architect.

(c) **Architectural Assistants**, Grade A.P.T. II (£765-£880).

Vacancies exist for assistants who are up to intermediate R.I.B.A. standard and who require experience in a variety of interesting projects.

The commencing salary can be within the grade according to ability and experience. Five-day week worked. The Council have schemes for the payment of removal expenses and a lodging allowance to married officers.

Application forms and full conditions applicable to the appointments can be obtained from Eric Davies, F.R.I.B.A., A.M.T.P.I., County Architect, Shire Hall, Warwick.

L. EDGAR STEPHENS,

Clerk of the Council.

Shire Hall,  
Warwick.

July, 1960.

[6832]

### Beeston and Stapleford Urban District Council

#### TEMPORARY ARCHITECTURAL ASSISTANTS

£1,500 per annum will be paid to suitably qualified Architects required for work in connection with the design and planning of a Covered Swimming Bath comprising two Pools.

Candidates should have good design ability, with experience in contemporary design and detailing.

Applications stating age, qualifications and experience, together with particulars of present and previous appointments and names and addresses of two referees, must be received by the Housing Architect, Town Hall, Beeston, Nottingham, not later than August 29, 1960.

H. D. JEFFRIES,

Clerk.

[6854]

### City of Leeds

#### City Architect's Department

APPLICATIONS are invited from persons holding appropriate professional qualifications for the following permanent posts:—

(a) **Assistant City Architect** (Housing).

(b) **Assistant City Architect** (Education and General).

Salary scale £1,790-£2,085 per annum. Grade "F".

The Assistant City Architect (Housing) will be responsible, under my control, for large house building programmes and should have had a wide experience of all forms of housing layout, comprehensive developments and multi-storey flats.

The Assistant City Architect (Education and General) will be responsible, under my control, for major educational building projects and large public buildings, e.g. multi-storey college, municipal office block, abattoir, swimming baths, etc.

Both posts carry great responsibilities and offer worthwhile opportunities to those who are keenly interested in design and the planning and organization of extensive municipal building schemes. Further details and application forms may be obtained from the undersigned.

Applications are also invited for the following permanent posts in (a) Housing and (b) Education and General sections of the department.

Post No. 1, **Principal Architects**, Grade C (£1,385-£1,620).

Post No. 2, **Assistant Principal Architects**, Grade B (£1,320-£1,485).

Post No. 3, **Senior Assistant Architects**, Grade A.P.T. V (£1,220-£1,375).

Post No. 4, **Senior Assistant Architects**, Grade A.P.T. IV (£1,065-£1,220).

Post No. 5, **Assistant Architects**, Grade A.P.T. III (£880-£1,065).

Post No. 6, **Architectural Assistants**, Grade A.P.T. II (£765-£880).

Applicants for the senior posts must hold appropriate professional qualifications and should have had a wide experience in either, housing, education or other types of large public building work and will be required to design and work on these projects to completion. Applicants will be considered on their capability for design, experience, contemporary outlook and suitability.

The appointments are superannuable—medical examination.

Application forms obtainable from the undersigned, are to be returned by 12 noon on Monday, September 5, 1960.

Canvassing disqualifies.

J. R. SHERIDAN-SHEDDEN,

City Architect.

Priestley House,  
Quarry Hill,  
Leeds 9.

[6867]

**LIBRARIAN** required mid Sept. for Architects' Co-Partnership. Interest and some knowledge of architecture preferable to qualifications. No Sats. Write 44 Charlotte St., W.1, or phone, LAngham 5791.

[6885]

### Cumbernauld New Town

THE population target of the new town has been increased to 70,000 and the building programme is to be expanded. The following staff are required urgently in the department of the Chief Architect and Planning Officer (L. Hugh Wilson) for work on a variety of interesting projects including industrial buildings and housing of all types:

(a) 2 **Assistant Architects**, Grade B, A.P.T. V/VI (£1,220-£1,390). A.R.I.B.A. required.

(b) 2 **Assistant Architects**, Grade C, A.P.T. III (£880-£1,065). A.R.I.B.A. required.

(c) 4 **Architectural Assistants**, Grade D, A.P.T. I/II (£610-£880). Inter. R.I.B.A. required.

(d) 3 **Assistant Planning Officers**, Grade C, A.P.T. III (£880-£1,065). A.R.I.B.A. and A.M.T.P.I. required.

(e) 1 **Assistant Landscape Architect**, A.P.T. II (£765-£880). Inter. I.L.A. required.

Commencing salary within the above grades will be fixed according to qualifications and experience.

Assistance with housing in appropriate cases. Five-day week. Local Government Superannuation subject to medical examination.

Application forms, which may be obtained from the General Manager, Cumbernauld Development Corporation, Cumbernauld House, Cumbernauld, Glasgow, should be returned completed not later than Monday, September 5, 1960.

[6870]

### Ashington Urban District Council

#### APPOINTMENT OF ASSISTANT ARCHITECT

APPLICATIONS are invited for the above appointment at a salary in accordance with A.P.T. Grade III (£880-£1,065) or within the Special Grade (£785-£1,070 per annum) according to qualifications and experience.

Housing accommodation will be available if required.

Applicants should have general experience in the preparation of specifications for Municipal housing schemes and should have passed the Intermediate R.I.B.A. Examination.

Forms of application may be obtained from the Engineer and Surveyor's Dept., Council Offices, Ashington, Northumberland, returnable by August 31, 1960.

JOHN KENT,

Clerk of the Council.

[6877]

### Salop County Architect's Department

THERE is a vacancy on the established staff for a qualified **ASSISTANT ARCHITECT**. Salary Grade £785-£1,070 p.a.—commencing point depending on ability and experience. N.J.C. Conditions. Five-day week. A disturbance allowance or weekly separation allowance may be paid to a married man taking up this appointment. Conditions of service and application forms obtainable from Ralph Crowe, A.A.Dipl., A.R.I.B.A., A.M.T.P.I., County Architect, Column House, London Road, Shrewsbury. Closing date September 3, 1960.

[6875]

## Official Announcements

### APPOINTMENTS (cont)

#### City of Leeds City Architect's Department Quantity Surveying Staff

A NUMBER of vacancies occur in the Quantity Surveying Section which deals with the preparation of bills of quantities and other work in connection with the large building programmes of the department. These programmes include schools, housing with multi-storey flats, hostels and other interesting projects and the posts offer opportunities to work as part of a team in a progressive office.

Post No. 1, **Senior Assistant Quantity Surveyor**, Grade B (£1,320-£1,485).

Applicants should have wide experience in the preparation of bills of quantities for major works including schools.

Post No. 2, **Senior Assistant Quantity Surveyor**, Grade A (£1,310-£1,420).

Applicants should have considerable experience in taking off and preference will be given to those with experience in cost analysis and cost planning.

Post No. 3, **Senior Assistant Quantity Surveyors**, Grade A.P.T. V (£1,220-£1,375).

Applicants should have considerable experience in taking off, in the measurement of work in progress and the settlement of final accounts for major schemes.

Post No. 4, **Senior Assistant Quantity Surveyors**, Grade A.P.T. IV (£1,065-£1,220).

Post No. 5, **Senior Assistant Quantity Surveyors**, Grade A.P.T. III (£880-£1,065). Applicants for posts Nos. 4 and 5 should be experienced in the measurement of variations and the settlement of final accounts for large schemes and should have some experience of taking off.

Post No. 6, **Senior Worker-up**, Grade A.P.T. III (£880-£1,065).

It is essential that applicants for this post should have the ability to write a good bill for major schemes and should have wide experience of this type of work in a professional office.

Applicants for posts Nos. 1, 2 and 3 should hold appropriate professional qualifications and applicants for posts Nos. 4 and 5 should have reached the appropriate standard of qualification and preference will be given to those qualifying for the Quantities sub-division of the R.I.C.S.

The appointments are superannuable—medical examination. Further details and application forms may be obtained from the undersigned and applications are to be returned by 12 noon on Monday, September 5, 1960. Canvassing disqualified.

J. R. SHERIDAN-SHEDDEN,  
City Architect.

Priestley House,  
Quarry Hill,  
Leeds 9.

[6868]

#### London County Council Architect's Department

**ARCHITECTS** (up to £1,250) required for Housing, Schools, General and Special Works Divisions. Full and varied programme of new work including schools, multi-storey flats and town development. Starting salaries according to qualifications and experience.

Particulars and form from Hubert Bennett, F.R.I.B.A., Architect to Council (EK/ABN/1639/8A), County Hall, S.E.1.

[0345]

**Metropolitan Borough of Hampstead**  
APPLICATIONS are invited for following vacancies in Housing Architect's Department:—

(1) **Junior Architectural Assistant** (Permanent), General Division (£210-£730 p.a. plus London Weighting).

(2) **Architectural Assistant** (Temporary), on A.P.T. Grades I/II (£610-£880 p.a. plus London Weighting) for Intermediate R.I.B.A., or Special Scale (£785-£1,070 plus London Weighting) for Final R.I.B.A.

Commencing salaries according to qualifications and experience.

Applications giving training, experience, previous appointments and names of two referees to Town Clerk (AB), Town Hall, Haverstock Hill, N.W.3, by September 7, 1960. No housing provided. [6887]

#### County Borough of Bury

APPLICATIONS invited for permanent appointment of **SENIOR ASSISTANT ARCHITECT**, A.P.T. IV (£1,065-£1,220). Commencing salary according to qualifications and experience. Applicants should be experienced in dealing with contracts for large public works and should be professionally qualified.

Applications, stating age, details of training, qualifications, experience, present and previous appointments, together with names and addresses of two referees, must reach me by August 29, 1960.

EDWARD S. SMITH,

Town Clerk.

Town Hall,  
Bury.

July 30, 1960.

[6844]

#### Borough of Warwick

##### APPOINTMENT OF CHIEF ASSISTANT ARCHITECT

APPLICATIONS are invited from Qualified Architects for the above appointment within the Special Grade (£785-£1,070).

Applications together with names and addresses of two persons to whom reference may be made must be delivered to my office not later than August 29, 1960.

Housing accommodation will be provided if necessary and removal expenses paid.

C. E. BROWN, A.M.I.Mun.E.,

Borough Engineer and Surveyor.

23 Jury Street,  
Warwick.

[6834]

#### Welsh Regional Hospital Board Regional Architect's Department

APPLICATIONS are invited for the following posts:—

(a) **Assistant Architects**. Applicants must be Registered Architects holding the final examination of the Royal Institute of British Architects, well experienced in design and modern methods of construction, together with practical building experience.

Salary £905-£1,310.

(b) **Architectural Assistants**. Applicants must hold the Intermediate Examination of the Royal Institute of British Architects.

Salary £625-£900.

(c) **Assistant Quantity Surveyors**. Applicants must hold the Final Examination of the Royal Institution of Chartered Surveyors and have a good experience in taking off, preparation of Bills of Quantities and estimates, and valuation of works in progress and the settlement of final accounts.

Salary £905-£1,310.

(d) **Architectural Draughtsman**. Applicants must have had suitable training including three years' technical experience in architectural drawing.

Salary £474-£685.

New entrants to the Health Service will commence at the minimum point of the salary scale. The Board has, however, discretion to fix a starting point at an incremental point above the minimum where it is considered a candidate has relevant practical experience which is appropriate to the post to be filled.

All posts superannuable, five-day week. Applications to the Secretary, Temple of Peace and Health, Cathays Park, Cardiff, within 14 days of the appearance of this advertisement, stating qualifications, age, experience, present position and salary and names of two referees. [6874]

#### Kent County Council

**ARCHITECTS** are required in the office of the County Architect to assist with the Council's expanding building programme which includes schools, colleges, residential homes and other public buildings. The salary range extends to £1,375 a year, the starting grade and salary depending on qualifications, ability and experience. Application forms and further details from the County Architect, Springfield, Maidstone. Closing date August 30, 1960.

[6861]

#### THE SOUTH WALES ELECTRICITY BOARD ARCHITECTURAL ASSISTANTS

Applications are invited for three vacancies in the Chief Engineer's Department at Head Office, St. Hellons

*These opportunities will be of particular interest to candidates seeking to widen their experience in an expanding industry*

**One Section Leader (Architectural Assistant)**—salary within the scale £1,005/£1,245 per annum with a minimum starting salary of £1,115 per annum.

**Two Senior Architectural Assistants**—salary within the scale £780/£1,015 per annum with a minimum starting salary of £890 per annum.

Preference will be given to candidates of Intermediate R.I.B.A. standard.

*Conditions of service are excellent with generous holiday allowances and possibility of further assistance towards studying. The posts are superannuable and arrangements for the transfer of present superannuation rights are possible for those joining from Public Utilities, Local Authorities, etc.*

Please send full details regarding your age, present position, present salary, qualifications and experience to the undersigned at St. Hellons, Cardiff, so as to arrive not later than 26th August, 1960. Quote reference 137/60/ABN.

Envelopes should be endorsed "Architectural Assistants".

R. G. WILLIAMS  
SECRETARY



## Official Announcements

### APPOINTMENTS (cont)

**ARCHITECTS AND MAINTENANCE SURVEYORS.** Pensionable posts for men and women at least 25 and under 35 on January 1, 1960 (extension for regular Forces service, Overseas Civil Service, established civil service and temporary Government service as Architect or Maintenance Surveyor). Candidates must be registered Architects or, alternatively, for Maintenance Surveyor posts, have achieved Corporate membership of R.I.C.S. (Building Section), or have passed examinations necessary for attaining Corporate membership. Salary (men, London) £830-£1,125 according to age, rising to £1,300. Promotion prospects. Write Civil Service Commission, 17 North Audley Street, London, W.1, for application form quoting S/60-61. [6886]

#### Corporation of London

APPLICATIONS are invited for temporary appointments in the City Engineer's Department:—

**Assistant Site Architect:** £1,325 per annum.

**Assistant Architect:** £1,120 per annum, in connection with the construction under contract of a large municipal building; for the duration of the works estimated at two-and-a-half years.

Candidates should be Corporate Members of the R.I.B.A. and have had good general experience in preparation of working detail and site supervision.

Applications, stating age, appointments held and experience, together with names of two referees to The City Engineer, Guildhall, London, E.C.2, by September 5, 1960. [6883]

#### Urban District of Brownhills Engineer and Surveyor's Department APPOINTMENT OF CHIEF ARCHITECTURAL ASSISTANT

APPLICATIONS are invited for a Chief Architectural Assistant at a salary within Grade A.P.T. IV/V (£1,065 to £1,375 per annum) according to experience.

Candidates must have passed the Final Examination of the R.I.B.A. and have had considerable experience in the preparation of plans and specifications, with particular reference to the design of Council houses.

Casual user car allowance will be paid. Housing accommodation will be made available if required and the appointment is subject to one month's notice on either side.

Architectural work being carried out by the department includes housing, multi-storey flats, shops, restaurant and central depot.

Applications endorsed "Chief Architectural Assistant", stating age, qualifications and experience, and accompanied by two recent testimonials, must be delivered to the undersigned not later than Wednesday, August 31, 1960.

NORMAN WAINE,

Clerk of the Council.

Council Offices,  
Brownhills. [6884]

#### Brixton School of Building

Required September, 3 ASSISTANTS, Grade B for Dept. of Architecture and Surveying; should be corporate members of either R.I.B.A. or R.I.C.S., preferably with one of the following interests (a) Construction; (b) Services; (c) Law and Economics.

Salary scale—£700 x £27 10s to £1,150 plus London allowance and additions for training and qualifications. Increments within scale for experience.

Application forms (foolscap s.a.e.) from Secretary at the School (FE3/ABN/2100/8), Ferndale Road, S.W.4.

Closing Date—September 1. [6889]

#### County Borough of Bury

APPLICATIONS invited for the permanent appointment of **ARCHITECTURAL DRAUGHTSMAN**, Miscellaneous III (£525-£590). Commencing salary according to qualifications and experience.

Applications stating age, qualifications, experience, present and previous appointments and salary, together with the names of two referees, must reach me by September 12, 1960.

EDWARD S. SMITH,

Town Clerk.

Town Hall,  
Bury.  
August 11, 1960. [6891]

#### County Borough of Bury

APPLICATIONS invited for the permanent appointment of **ASSISTANT ARCHITECT**, Special Grade (£785-£1,070). Commencing salary according to qualifications and experience.

Applicants must have passed Parts I and II of the R.I.B.A. Final or Special Final Examination, or other equivalent at one of the recognized Schools of Architecture. Applications stating age, details of training, and qualifications and experience, present and previous appointments and salary, together with the names of two referees, must reach me by September 12, 1960.

EDWARD S. SMITH,

Town Clerk.

Town Hall,  
Bury.  
August 11, 1960. [6890]

#### City and County of Newcastle upon Tyne City Architect's Department

CONSEQUENT upon revisions to the Establishment of his Department, the City Architect is now able to offer vacancies in the various Architectural Sections of the Department and will be pleased to hear from Architects who are keen to take part in an exciting and extensive programme of high quality architectural work.

**Senior Assistant Architects** (General, New Town Hall, Education, Housing and Rehousing Sections), A.P.T. V (£1,220-£1,375 per annum).

**Senior Assistant Architects** (General, New Town Hall and Housing Sections), A.P.T. IV (£1,065-£1,220 per annum).

**Senior Assistant Architects** (Housing and Rehousing Sections), A.P.T. III (£880-£1,065 per annum).

**Assistant Architect** (Rehousing Section), A.P.T. II (£765-£880 per annum).

**Architectural Assistants** (Education and Rehousing Sections), A.P.T. I (£610-£765 per annum).

Work has now commenced on the superstructure of the New Town Hall and there are interesting schemes in preparation for Colleges of Further Education, Multi-Storey Flats and other building works of a major nature. There is, too, the prospect of stimulating work in the near future on redevelopment of the City Centre.

Further details of the above posts and Forms of Application may be obtained from George Kenyon, A.R.I.B.A., A.M.T.P.I., City Architect, 18 Cloth Market, Newcastle upon Tyne 1. Applicants must state the Section of the Department and the post and grade applied for when requesting particulars. Closing date for completed applications: Saturday, September 10, 1960.

JOHN ATKINSON,

Town Clerk.

Town Hall,  
Newcastle upon Tyne 1.  
August 10, 1960. [6882]

## BRACKNELL DEVELOPMENT CORPORATION

Applications are invited for the following appointments:

### (a) Senior Architect

Grade VIII (£1,392 x £57(4) — £1,620)

The development of the New Town of Bracknell, begun in 1950, is now in a very interesting stage, and a Senior Architect is required to take charge of planning aspects, under the Chief Architect, and to work out in detail important central areas of the present Master Plan and probably to plan the extension of the Designated Area from 1,850 to 3,050 acres and the population from 25,000 to 40,000, regarding which the Minister is in statutory consultation with the County and Local Authorities.

Applicants should be Corporate Members of the R.I.B.A. and the T.P.I. with a high degree of skill in the following duties:—

- the preparation of Central Area and Neighbourhood plans.
- the examination of planning applications, in conjunction with County and Local Authorities, and giving evidence at Inquiries.
- the preparation of preliminary housing layouts and basic house design.

The post offers considerable scope in a variety of interesting work.

### (b) Assistant Architects

(2) — Grade IV (£1,065 x £55 x £50(2) — £1,220)

Applicants should be Corporate Members of the R.I.B.A. and will be required to assist with the above planning and in the general work of the Department.

Superannuation schemes, medical examination. Good housing accommodation available for each post.

Applications, stating the post applied for and giving age, education, qualifications, experience and appointments held (with dates and salaries) should be addressed to the **General Manager (A)**, Bracknell Development Corporation, Farley Hall, Bracknell, Berks, to be received not later than the 31st August, 1960.

## Official Announcements

### APPOINTMENTS (cont)

#### City and County of Newcastle upon Tyne APPOINTMENT OF CHIEF ASSISTANT ARCHITECT (GENERAL)

APPLICATIONS are invited for the appointment of Chief Assistant Architect (General) in the City Architect's Department at a salary in accordance with J.N.C. Scale "E" (£1,655 per annum, rising by annual increments to a maximum of £1,885 per annum).

Applicants must be Fellows or Associates of the Royal Institute of British Architects and should have received a sound architectural training, preferably at a recognized School of Architecture. The Officer appointed will be responsible, under the direction of the City Architect, for the control of all building work undertaken by the Department for all Committees of the Corporation other than Housing and Education.

Further details of the post and Forms of Application may be obtained from George Kenyon, A.R.I.B.A., A.M.T.P.I., City Architect, 18 Cloth Market, Newcastle upon Tyne 1.

Closing date for completed Applications: Saturday, September 3, 1960.

JOHN ATKINSON,  
Town Clerk.

Town Hall,  
Newcastle upon Tyne 1.  
July 28, 1960. [6839]

#### City and County of Newcastle upon Tyne City Architect's Department

CONSEQUENT upon revisions in the establishment of his Department the City Architect is now able to offer vacancies in the following senior posts in the Department and will be pleased to hear from Architects who are keen to take part in an exciting programme of high quality architectural work:—

(a) One **Principal Assistant Architect** (General Section), J.N.C. Scale "C" (£1,385-£1,620 per annum).

(b) Two **Principal Assistant Architects** (Housing Section and Rehousing Section), J.N.C. Scale "B" (£1,255-£1,485 per annum).

Further details of the posts and Forms of Application may be obtained from George Kenyon, A.R.I.B.A., A.M.T.P.I., City Architect, 18 Cloth Market, Newcastle upon Tyne 1. Applicants must state the Section of the Department and post applied for when requesting particulars.

Closing date for completed applications, Saturday, September 3, 1960.

JOHN ATKINSON,  
Town Clerk.

Town Hall,  
Newcastle upon Tyne 1.  
July 29, 1960. [6840]

#### County Borough of West Ham Borough Architect and Planning Officer's Department

APPLICATIONS invited for established posts as follows:—

**Group Architect**—£1,065-£1,220 p.a.  
**Deputy Group Architect**—£785-£1,070 p.a.

**Architectural Assistant**—£610-£765 p.a. (London Allowance in addition).  
Commencing salary according to qualifications and experience.

Applications to: Borough Architect and Planning Officer, 70 West Ham Lane, Stratford, E.15. [6873]

**SURVEYORS (Basic Grade)** required by Ministry of Works in LONDON, HOME COUNTIES AND ABERDEEN. National Salary Scale £805 (at age 25) to £1,260 per annum. Starting pay up to £1,095 at age 34 according to age and experience. Salary for London posts is subject to an addition of up to £40 per annum. Five-day week, 22 days annual leave. Prospects of promotion and opportunities for permanent and pensionable posts.

Applicants should be registered architects by examination or corporate members of R.I.C.S. (Building Section). Apply stating age, qualifications and full details of experience to Chief Maintenance Surveyor (Recruitment), Ministry of Works (A), Stanley House, Marsham Street, London, S.W.1. [6893]

#### ARCHITECTURAL ASSISTANTS INTERMEDIATE OR FINALS STANDARD

required in  
Chief Architect's office

Interesting and varied work. Five-day week, bonus, etc. Appointments permanent and superannuable.

Write (in confidence) stating age, experience and salary required to Personnel Manager,

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London Road, Norbury, S.W.16  
[0830]

#### Merioneth County Council

**DEPUTY COUNTY PLANNING OFFICER** required at a salary within Grade A.P.T. IV. Applicants should be Corporate Members of the Town Planning Institute by examination and preference will be given to those who also possess an Architectural qualification. A car allowance will be paid on the "essential user" scale for a car not exceeding 1199 c.c. Further particulars and application form from the Clerk of the County Council, County Offices, Penarlag, Dolgellau. Closing date; September 3, 1960. [6871]

#### University of Cambridge ASSISTANT LECTURER IN ARCHITECTURE

APPLICATIONS are invited for the post of Assistant Lecturer in the School of Architecture from January 1, 1961. The duties will consist mainly of instruction in the studios.

Particulars may be obtained from the Secretary of the Appointments Committee of the Faculty of Fine Arts, 1 Scroope Terrace, Cambridge. Applications should be submitted by September 10, 1960. July 28, 1960. [6843]

**County Borough of Brighton  
CLERK OF WORKS** (Temporary Staff) required for a period of approximately two years on the erection of a new College of Technology. The building will be of reinforced concrete construction with highly specialized services and is expected to cost about £1,000,000. It is essential that applicants have had experience on large contracts of similar construction.

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Applications giving full particulars including age, experience, etc., to D. J. Howe, Esq., M.I.C.E., M.I.Mun.E., Borough Surveyor, Engineer and Planning Officer, 26/30 King's Road, Brighton, by noon on September 7, 1960.

W. O. DODD,

Town Hall, Town Clerk.

Brighton, August 11, 1960. [6892]

#### Haydock Urban District Council

Surveyor's Department

APPLICATIONS are invited from persons suitably experienced in Housing and other Local Authority work, for the appointment of an **ARCHITECTURAL ASSISTANT** at a salary in accordance with A.P.T. Grade II (£765-£880 per annum).

The appointment will be subject to one month's notice either side.

The provisions of the Local Government Superannuation Acts, and the National Joint Council's Scheme of Conditions of Service will apply after satisfactory medical examination.

Housing accommodation will be considered if necessary.

Applications stating age, experience, qualifications and present and previous posts, together with the names of two referees, should be submitted to the undersigned not later than Saturday, September 3, 1960.

C. LEDGER,

Clerk of the Council.

Council Offices,  
Church Road,  
Haydock,  
St. Helens, Lancs.

[6894]

### TENDERS

#### Ross-on-Wye Urban District Council

**FIXED PRICE TENDERS** are invited for the **ERECTION OF A BLOCK OF FOUR FLATS (TWO-STORY), TOGETHER WITH DRAINS, PATHS AND ALL ANCILLARY WORKS**, at Brampton Avenue, Berryfield estate, Ross-on-Wye.

Applications for bills of quantities and form of tender, accompanied by a deposit cheque for £2 2s payable to Ross-on-Wye Urban District Council, must be made not later than August 16, 1960, to Edgar F. Young, A.R.I.C.S., Chartered Quantity Surveyor, 4 Imperial Square, Cheltenham. The deposit will be returned on receipt of a bona fide tender.

Bills of quantities, form of tender, and envelope for the return of tender will be issued on August 27, 1960, and tenders, enclosed in the envelope provided for the purpose must be delivered to the undersigned not later than 12 NOON ON **SATURDAY, SEPTEMBER 17, 1960**. The council does not bind itself to accept the lowest or any tender.

E. MOSES,

Clerk of the Council.

Council Chambers,  
Ross-on-Wye,  
Herefordshire.

[6866]

### ARCHITECTURAL APPOINTMENTS VACANT

#### ARCHITECTURAL DRAUGHTSMAN

required for Shops and Interiors. Apply in writing only to: Staff Architect, Richard Henry Design Unit, Collingwood House, Mercers Rd., London, N.19. [6863]

**PATRICK GWYNNE** requires senior assistant to work on important private houses and interiors. The Homewood, Esher, Surrey. Esher 3310. [6803]

**BRIAN PEAKE** requires Junior Staff interested in gaining experience by running small contracts. Tel.: GRO 7888. [6830]

**BASIL SPENCE & PARTNERS** require qualified and experienced Architects to fill positions of responsibility on a major building programme. Write to 48 Queen Anne Street, W.1, stating experience and salary required. [0740]

## Official Announcements

### ARCHITECTURAL APPOINTMENTS VACANT (cont)

**DEVEREUX & DAVIES** require capable and enthusiastic assistant architects, salary £1,000 per annum or according to experience and ability.—Devereux & Davies, 3 Gower Street, Bedford Square, London, W.C.1. [0650]

**ARCHITECTURAL ASSISTANT**, London, Final standard. Industrial and commercial. Progressive and interesting. Salary according to experience and ability. Box 3667. [0079]

**ARCHITECTURAL ASSISTANT**, Intermediate standard. Busy London office. Good prospects. Box 3668. [0080]

**WEST END OFFICE** requires Assistant Architects of Final and Intermediate Standards for interesting industrial projects in Home Counties. Good salaries offered to men with initiative and ability. Bonus scheme, five-day week, holiday arrangements honoured. Box 0627. [0380]

**ARCHITECTURAL ASSISTANT** required, with at least two years' office experience. Apply in writing to Thomas Mitchell & Partners, 20 Bedford Square, London, W.C.1. [0916]

**YOUNG LONDON OFFICE** of Grenfell Baines & Hargreaves wants architects for a variety of jobs and competitions: Contact David Rock, 4 Cavendish Place, London, W.1. Tel: LAngham 2621. [6857]

**WESTON-SUPER-MARE**. Architectural Assistant. Inter/Final Standard, required for varied work. Details and Salary required, to N. H. N. Darby & Partners, 1 The Centre, Weston-super-Mare. [6858]

**ARCHITECT** requires Chief or Senior Assistant, for interesting work including shops, offices and schools. Apply in writing stating age, experience and salary required to Roff Marsh, F.R.I.B.A., M.T.P.I., 125/7 London Road, Chelmsford. [6865]

**WANTED ARCHITECTURAL ASSISTANT**. Inter-standard. Facilities for part-time schooling. Private practice. Stockport, Cheshire. Please apply stating age, experience and salary required. Box 1193. [6848]

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**WILLIAM RYDER** requires keen assistant of post-intermediate standard to work on multi-storey flats, or shop and office developments. Five-day week. Apply in writing to 21 Bruton Street, Berkeley Square, W.1. [6835]

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**LANDSCAPING AND GROUNDWORK ASSISTANTS** for preparation of working drawings and specifications and supervision of contracts on new parks, gardens and playing fields. Good background in horticulture valuable. Up to £950 a year in the first instance according to qualifications and experience. Prospects of higher pay and promotion according to ability and output. [6880]

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**A NEW DESIGN GROUP** is being formed by West End Architects. Architectural Designers wanted immediately who will have excellent prospects leading to senior positions in the organization. Only people with outstanding design ability and enthusiasm should apply. There are also vacancies for intermediate and qualified assistants. Pension scheme available, holiday commitments honoured. Salary immaterial, to be agreed according to ability. Applications in writing to H. A. Halpern & Associates, Chartered Architects and Town Planning Consultants, Cumberland Chambers, 7 Edgware Road, London, W.2. [6872]

**ARCHITECTURAL ASSISTANTS OR DRAUGHTSMEN**, intermediate standard or above, required for Architect's Department of Public Company, specializing in the development of commercial and industrial properties in all parts of the country. Permanent and progressive positions, unaffected by depressions in the money market, together with a good salary, are available to keen and capable applicants. Write or telephone Mr. S. M. Haines, Town & Commercial Properties Ltd., 25 Grosvenor Street, London, W.1. HYDe Park 3841. [6895]

**ARCHITECTURAL ASSISTANTS**, industrious and with initiative, capable of sound detail design to work a five-day week at Gresse Street, W.1, or Hemel Hempstead New Town. Salaries £1,000 to £1,500 per annum. Luncheon vouchers, pension scheme for permanent staff, interesting work from nuclear power stations to barbecues. Apply Maurice Bebb, 16-19 Gresse Street, W.1. Envelope marked "Architectural Assistants". [6880]

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### TUITION

**UNIVERSITY OF MANCHESTER**. The next session commences on Tuesday, October 11, 1960. [6869]



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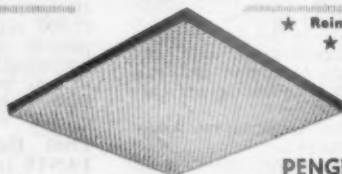
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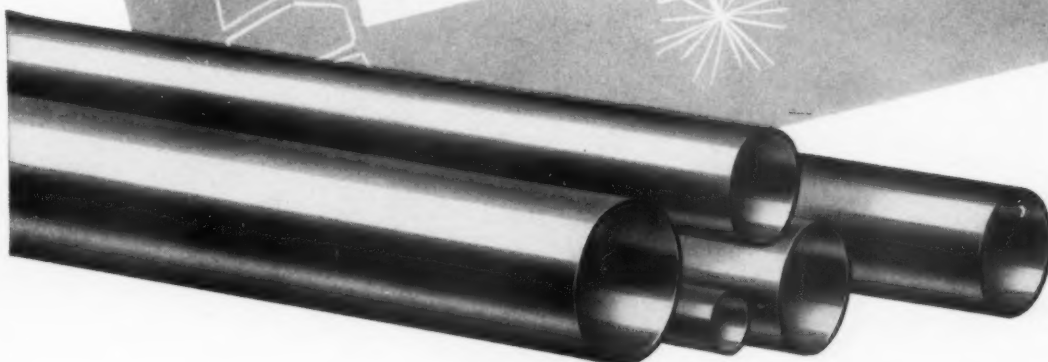
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